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ESTIMATES OF APPROPRIATION

— FOR THE —

DEPARTMENT OF AGRICULTURE

REQUIRED FOR THE SERVICE OF THE
FISCAL YEAR ENDING JUNE 30

1922

PREPARED FOR THE USE OF THE COMMITTEE ON AGRICULTURE,
HOUSE OF REPRESENTATIVES

NOTE.—Matter or items appearing in the last appropriation act and proposed to be omitted from these estimates is inclosed in heavy brackets, thus [].

New or substituted matter appearing in miscellaneous appropriations is printed in *italics*.



WASHINGTON
GOVERNMENT PRINTING OFFICE
1920

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United States Department of Agriculture.

Comparison of estimates of appropriations for 1922 with appropriations made for 1921.

Titles of appropriations.	Total of appropriations for 1921.	Total of estimates for 1922.	Apparent increase in estimates for 1922 over act for 1921.	Actual increase in estimates for 1922 over act for 1921.	Apparent decrease in estimates for 1922 below act for 1921.	Actual decrease in estimates for 1922 below act for 1921.
OFFICE OF THE SECRETARY.						
Statutory salaries.....	\$465, 260.00	\$414, 030.00			\$51, 230.00	\$51, 230.00
Mechanical shops and power plant.....		120, 000.00	\$120, 000.00	\$120, 000.00		
BUREAU OF FARM MANAGEMENT AND FARM ECONOMICS.						
Statutory salaries.....	75, 390.00	92, 910.00	17, 520.00	3, 080.00		
General expenses:						
Farm management and practice.....	221, 127.00	612, 080.00	312, 080.00	326, 520.00		
Cost of production.....	78, 873.00					
A net increase of \$398,370.	840, 650.00	1, 239, 020.00	449, 600.00	449, 600.00	51, 230.00	51, 230.00
WEATHER BUREAU.						
Statutory salaries.....	344, 450.00	400, 290.00	55, 840.00	50, 730.00		
General expenses:						
Central office expenses.....	109, 250.00	126, 910.00	17, 660.00	18, 500.00		
Printing office.....	12, 800.00	14, 450.00	1, 650.00	3, 000.00		
Station salaries.....	700, 000.00	1, 398, 610.00	95, 580.00	98, 500.00		
Special observations and reports.....	129, 040.00					
Telegraphing and telephoning.....	295, 750.00					
Miscellaneous station expenses.....	178, 240.00					
Traveling expenses.....	26, 000.00	33, 500.00	7, 500.00	7, 500.00		
Investigating atmospheric phenomena.....	81, 020.00	281, 020.00	200, 000.00	200, 000.00		
Highway weather service.....		20, 000.00	20, 000.00	20, 000.00		
Stations on national forests.....		15, 000.00	15, 000.00	15, 000.00		
Marine meteorological work.....		30, 000.00	30, 000.00	30, 000.00		
A net increase of \$443,230.	1, 876, 550.00	2, 319, 780.00	443, 230.00	443, 230.00		
BUREAU OF ANIMAL INDUSTRY.						
Statutory salaries.....	667, 230.00	666, 850.00			380.00	6, 220.00
General expenses:						
Inspection and quarantine.....	519, 640.00	605, 740.00	86, 100.00	86, 100.00		
Eradication of tuberculosis—						
Operating expenses.....	800, 000.00	1, 978, 800.00	498, 360.00	500, 000.00		
Indemnities.....	680, 440.00					
Eradicating cattle ticks.....	681, 160.00	701, 160.00	20, 000.00	20, 000.00		
Dairy industry.....	325, 000.00	498, 000.00	173, 000.00	174, 400.00		
Animal husbandry.....	216, 180.00	368, 700.00	152, 520.00	152, 520.00		
Military horse breeding.....	20, 000.00				20, 000.00	20, 000.00
Poultry feeding and breeding.....	58, 640.00	78, 300.00	19, 660.00	19, 660.00		
Equipping sheep station.....	8, 000.00				8, 000.00	8, 000.00
Erection of buildings at sheep station.....		15, 000.00	15, 000.00	15, 000.00		
Diseases of animals.....	66, 400.00	107, 770.00	41, 370.00	41, 370.00		
Contagious abortion of animals.....	40, 000.00	40, 000.00				
Eradicating hog cholera.....	192, 200.00	446, 865.00	254, 665.00	254, 665.00		
Control of viruses, etc.....	188, 280.00	202, 540.00	14, 260.00	14, 260.00		
Hog-cholera research.....	29, 520.00	29, 520.00				
Eradicating dourine.....	65, 200.00	63, 800.00			1, 400.00	
Construction of buildings at Beltsville.....		30, 000.00	30, 000.00	30, 000.00		
Administrative expenses.....	26, 686.00	41, 686.00	15, 000.00	15, 000.00		
Meat inspection.....	892, 580.00	1, 200, 200.00	307, 620.00	309, 020.00		
A net increase of \$1,597,775.	5, 477, 156.00	7, 074, 931.00	1, 627, 555.00	1, 631, 995.00	29, 780.00	34, 220.00
BUREAU OF PLANT INDUSTRY.						
Statutory salaries.....	517, 300.00	511, 380.00			5, 920.00	5, 920.00
General expenses:						
Pathological laboratory.....	62, 020.00	92, 020.00	30, 000.00	30, 000.00		
Fruit diseases.....	72, 935.00	93, 135.00	20, 200.00	20, 200.00		
Pecan diseases.....	8, 000.00	8, 000.00				
Citrus canker.....	109, 720.00	109, 720.00				
Forest pathology.....	81, 115.00	81, 115.00				
Blister-rust control.....	214, 168.00	214, 168.00				
Cotton and truck diseases.....	95, 400.00	125, 400.00	30, 000.00	30, 000.00		
Crop physiology.....	46, 860.00	66, 860.00	20, 000.00	20, 000.00		

Comparison of estimates of appropriations for 1922 with appropriations made for 1921—Continued.

Titles of appropriations.	Total of appropriations for 1921.	Total of estimates for 1922.	Apparent increase in estimates for 1922 over act for 1921.	Actual increase in estimates for 1922 over act for 1921.	Apparent decrease in estimates for 1922 below act for 1921.	Actual decrease in estimates for 1922 below act for 1921.
BUREAU OF PLANT INDUSTRY—continued.						
General expenses—Continued.						
Bacteriology and nutrition.....	\$39,060.00	\$74,060.00	\$35,000.00	\$35,000.00		
Soil fertility.....	45,060.00	60,060.00	15,000.00	15,000.00		
Crop acclimatization.....	93,910.00	173,910.00	80,000.00	80,000.00		
Cottonseed interbreeding.....	7,500.00	7,500.00				
Drug and other plants.....	39,820.00	65,820.00	26,000.00	26,000.00		
Crop technology.....	24,940.00	24,940.00				
Seed-testing laboratories.....	41,680.00	62,380.00	20,700.00	20,700.00		
Cereal investigations.....	162,505.00	272,700.00	110,195.00	110,195.00		
Black, leaf, and stripe rust.....	50,000.00	50,000.00				
Barberry eradication.....	147,200.00	147,200.00				
Cereal-disease control.....	50,000.00	50,000.00				
Tobacco investigations.....	32,000.00	41,000.00	9,000.00	9,000.00		
Alkali and drought-resistant crops.....	20,080.00	20,080.00				
Sugar plants.....	94,115.00	112,115.00	18,000.00	18,000.00		
Construction of greenhouse on Arlington farm.....		7,000.00	7,000.00	7,000.00		
Economic and systematic botany.....	22,200.00	32,200.00	10,000.00	10,000.00		
Dry-land agriculture.....	159,000.00	169,000.00	10,000.00	10,000.00		
Western irrigation agriculture.....	52,380.00	94,420.00	42,040.00	42,040.00		
Nut culture.....	20,000.00	30,000.00	10,000.00	10,000.00		
Pomology.....	83,200.00	110,000.00	26,800.00	26,800.00		
Experimental gardens and grounds.....	11,690.00	20,205.00	8,515.00	8,515.00		
Horticulture.....	71,940.00	101,940.00	30,000.00	30,000.00		
Nursery-stock investigation.....	20,000.00	30,000.00	10,000.00	10,000.00		
Arlington farm.....	20,500.00	30,000.00	9,500.00	9,500.00		
Foreign seed and plant introduction.....	92,700.00	173,800.00	81,100.00	81,100.00		
Forage-crop investigations.....	79,140.00	101,400.00	22,260.00	27,260.00		
New and rare seeds.....	50,860.00	56,600.00	5,740.00	5,740.00		
Biophysical investigations.....		32,500.00	32,500.00	32,500.00		
Determining purity, etc., of seed.....		25,000.00	25,000.00	25,000.00		
Administrative expenses.....	25,980.00	25,980.00				
Purchase and distribution of valuable seeds.....	239,416.00				\$239,416.00	\$239,416.00
A net increase of \$499,214.	3,004,394.00	3,503,608.00	744,550.00	749,550.00	245,336.00	245,336.00
FOREST SERVICE.						
Statutory salaries.....	2,468,380.00	3,398,044.00	929,664.00	804,664.00		
General expenses:						
Miscellaneous forest wages.....	125,000.00				125,000.00	125,000.00
National forests.....	1,620,292.00	2,320,292.00	700,000.00	705,000.00		
General administration.....	479,970.00	650,000.00	170,030.00	170,030.00		
Lands.....	87,000.00	87,000.00				
Equipment and supplies.....	150,000.00	175,000.00	25,000.00	25,000.00		
Forest products.....	223,260.00	400,000.00	176,740.00	176,740.00		
Range investigations, national forests.....	35,000.00	70,000.00	35,000.00	35,000.00		
Planting national forests.....	120,640.00	170,640.00	50,000.00	45,000.00		
Silvical investigations.....	50,000.00	155,000.00	105,000.00	105,000.00		
Reconnaissance, national forests.....	80,000.00	125,000.00	45,000.00	45,000.00		
Miscellaneous forest investigations.....	31,280.00	36,960.00	5,680.00	5,680.00		
Improvement of the national forests.....	400,000.00	500,000.00	100,000.00	100,000.00		
Study of forests.....		25,000.00	25,000.00	25,000.00		
Development of recreational resources.....		50,000.00	50,000.00	50,000.00		
Combating insects.....		25,000.00	25,000.00	25,000.00		
Fire prevention.....		400,000.00	400,000.00	400,000.00		
A net increase of \$2,592,114.	5,870,822.00	8,587,936.00	2,842,114.00	2,717,114.00	125,000.00	125,000.00
BUREAU OF CHEMISTRY.						
Statutory salaries.....	426,190.00	351,090.00			75,100.00	580.00
General expenses:						
Agricultural investigations.....	70,400.00	100,400.00	30,000.00	30,000.00		
Collaboration with other departments.....	14,000.00	14,000.00				
Poultry, egg, and fish investigations.....	52,880.00	52,880.00		720.00		
Investigating leather-making materials.....		15,000.00	15,000.00	15,000.00		
Investigating grain-dust explosion.....		50,000.00	50,000.00	50,000.00		
Investigation of vegetables, fats, and oils.....		20,000.00	20,000.00	20,000.00		
Investigating of sorghum grains.....		15,000.00	15,000.00	15,000.00		
Color investigations.....	68,260.00	89,960.00	21,700.00	27,000.00		
Table and sweet sirup investigations.....	7,500.00	35,000.00	20,000.00	20,000.00		
Sweet-potato investigations.....	7,500.00					
Enforcement of the food and drugs act.....	579,361.00	763,401.00	184,040.00	100,000.00		
Enforcement of the tea-importation act.....	40,000.00	36,500.00			3,500.00	
Naval stores investigations.....	10,000.00	10,000.00				
Insecticide and fungicide investigations.....	25,000.00	25,000.00				
Drying of vegetables, fruits, etc.....	23,500.00	100,000.00	76,500.00	76,500.00		
Wool scouring waste investigations.....	9,000.00	9,000.00				
A net increase of \$447,480.	1,333,591.00	1,687,231.00	432,240.00	354,220.00	78,600.00	580.00

Comparison of estimates of appropriations for 1922 with appropriations made for 1921—Continued.

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BUREAU OF SOILS.						
Statutory salaries.....	\$79,240.00	\$84,340.00	\$5,100.00	\$5,100.00		
General expenses:						
Chemical investigations.....	23,110.00	42,540.00	19,430.00	19,430.00		
Physical investigations.....	12,225.00	17,225.00	5,000.00	5,000.00		
Investigating fertilizer resources.....	36,840.00	36,840.00				
Atmospheric nitrogen investigations.....		35,000.00	35,000.00	35,000.00		
Phosphate investigations.....		35,000.00	35,000.00	35,000.00		
Potash investigations.....		25,000.00	25,000.00	25,000.00		
Soil survey investigations.....	178,900.00	228,900.00	50,000.00	50,000.00		
Classification of agricultural lands.....	15,000.00	15,000.00				
Extraction of potash salts from kelp.....	192,900.00	208,500.00	15,600.00	15,600.00		
Administrative expenses.....	4,000.00	4,000.00				
A net increase of \$190,130.	542,215.00	732,345.00	190,130.00	190,130.00		
BUREAU OF ENTOMOLOGY.						
Statutory salaries.....	132,790.00	136,250.00	3,460.00	3,460.00		
General expenses:						
Deciduous insects.....	178,500.00	198,500.00	20,000.00	20,000.00		
Cereal and forage insects.....	145,660.00	165,660.00	20,000.00	20,000.00		
Southern field crop insects.....	125,000.00	175,000.00	50,000.00	50,000.00		
Forest insects.....	40,000.00	67,500.00	27,500.00	27,500.00		
Truck crop insects.....	110,000.00	120,000.00	10,000.00	40,000.00		
Stored product insects.....		40,000.00	40,000.00	10,000.00		
Bee culture.....	33,800.00	38,800.00	5,000.00	5,000.00		
Tropical and subtropical fruit insects.....	51,500.00	66,500.00	15,000.00	15,000.00		
Miscellaneous insects.....	52,330.00	84,330.00	32,000.00	32,000.00		
Administrative and miscellaneous.....	3,880.00	3,880.00				
Preventing spread of moths.....	250,000.00	600,000.00	350,000.00	350,000.00		
European corn borer.....		400,000.00	400,000.00	400,000.00		
A net increase of \$972,960.	1,123,460.00	2,096,420.00	972,960.00	972,960.00		
BUREAU OF BIOLOGICAL SURVEY.						
Statutory salaries.....	67,450.00	94,830.00	27,380.00	12,200.00		
General expenses:						
Maintenance of mammal and bird reservations.....	37,235.00	42,535.00	5,300.00	5,300.00		
Game for national reservations.....	2,500.00	2,500.00				
Food habits of birds and animals.....	456,040.00	600,000.00	143,960.00	152,760.00		
Reindeer and fur bearers in Alaska.....	40,000.00	75,000.00	35,000.00	35,000.00		
Biological investigations.....	24,400.00	39,400.00	15,000.00	15,000.00		
Protection of migratory birds.....	122,000.00	179,500.00	57,500.00	63,880.00		
Game preservation.....	20,500.00	20,500.00				
Administrative expenses.....	10,760.00	20,000.00	9,240.00	9,240.00		
Sullys Hill, national park game preserve.....	5,000.00	5,000.00				
A net increase of \$293,380.	785,885.00	1,079,265.00	293,380.00	293,380.00		
DIVISION OF ACCOUNTS AND DISBURSEMENTS.						
Statutory salaries.....	49,820.00	55,020.00	5,200.00	5,200.00		
A net increase of \$5,200.						
DIVISION OF PUBLICATIONS.						
Statutory salaries.....	242,020.00	300,860.00	58,840.00	52,720.00		
General expenses:						
Labor-saving material and machinery.....	6,000.00	6,000.00				
Stationery and materials.....	9,000.00	12,000.00	3,000.00	3,000.00		
Furniture and fixtures.....	1,320.00	3,000.00	1,680.00	1,680.00		
Photographic equipment.....	22,000.00	25,000.00	3,000.00	3,000.00		
Communication and transportation service.....	900.00	1,200.00	300.00	300.00		
Wagons, horses, etc.....	1,000.00	2,000.00	1,000.00	1,000.00		
Miscellaneous expenses.....	4,350.00	5,000.00	650.00	650.00		
Emergency employments.....	17,500.00	17,500.00		6,120.00		
Agricultural exhibits at fairs.....	70,000.00	70,000.00				
A net increase of \$68,470.	374,090.00	442,560.00	68,470.00	68,470.00		

Comparison of estimates of appropriations for 1922 with appropriations made for 1921—Continued.

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BUREAU OF CROP ESTIMATES.						
Statutory salaries.....	\$130,580.00				\$130,580.00	\$130,580.00
General expenses:						
Administrative expenses.....	20,000.00				20,000.00	20,000.00
Field investigations.....	168,076.00				168,076.00	168,076.00
A net decrease of \$318,656.	318,656.00				318,656.00	318,656.00
LIBRARY.						
Statutory salaries.....	32,480.00	\$35,540.00	\$3,060.00	\$2,460.00		
General expenses.....	22,000.00	42,000.00	20,000.00	20,600.00		
A net increase of \$22,460.	54,480.00	77,540.00	23,060.00	23,060.00		
Miscellaneous expenses.....	136,000.00	201,000.00	65,000.00	65,000.00		
A net increase of \$65,000.						
Rent of buildings in District of Columbia.....	164,666.00	164,666.00				
STATES RELATION SERVICE.						
Statutory salaries.....	234,880.00	235,400.00	520.00	520.00		
General expenses:						
Agricultural experiment stations.....	1,440,000.00	1,440,000.00				
Colleges and stations.....	61,500.00	81,500.00	20,000.00	20,000.00		
Farmers' cooperative demonstrations—North and West.....	715,720.00	715,720.00				
Farmers' cooperative demonstrations—South.....	634,800.00	634,800.00				
Cooperative agricultural extension work.....	1,500,000.00	1,500,000.00				
Farmers' institutes and agricultural schools.....	16,360.00	20,600.00	4,240.00	4,240.00		
Agricultural experiment station—Alaska.....	75,000.00	120,000.00	45,000.00	45,000.00		
Agricultural experiment station—Hawaii.....	50,000.00	70,000.00	20,000.00	20,000.00		
Agricultural experiment station—Porto Rico.....	50,000.00	50,000.00				
Agricultural experiment station—Guam.....	15,000.00	40,000.00	25,000.00	25,000.00		
Agricultural experiment station—Virgin Islands.....	20,000.00	30,000.00	10,000.00	10,000.00		
Home economics.....	44,300.00	80,000.00	35,700.00	35,700.00		
General administrative expenses.....	12,600.00	20,000.00	7,400.00	7,400.00		
A net increase of \$167,860.	4,870,160.00	5,038,020.00	167,860.00	167,860.00		
BUREAU OF PUBLIC ROADS.						
Statutory salaries.....	117,300.00	120,720.00	3,420.00			3,880.00
General expenses:						
Road management.....	36,200.00	61,200.00	25,000.00	27,280.00		
Investigating road building and maintenance.....	102,300.00	77,300.00			25,000.00	19,980.00
Road material.....	77,020.00	148,200.00	71,180.00	71,180.00		
Field experiments.....	25,000.00	25,000.00				
Farm irrigation.....	62,440.00	105,000.00	42,560.00	42,560.00		
Farm drainage.....	53,760.00	95,000.00	41,240.00	41,240.00		
Investigating use of war explosives.....		25,000.00	25,000.00	25,000.00		
Rural engineering.....	25,000.00	100,000.00	75,000.00	75,000.00		
Administrative expenses.....	16,000.00	16,000.00				
Laboratory building, Arlington Farm.....		75,000.00	75,000.00	75,000.00		
A net increase of \$332,100.	515,020.00	848,420.00	358,400.00	357,260.00	25,000.00	23,860.00
BUREAU OF MARKETS.						
Statutory salaries.....	710,650.00	937,870.00	227,220.00	185,020.00		
General expenses:						
Marketing and distributing farm products.....	280,000.00	300,000.00		113,560.00		
Preservation of fruits and vegetables.....	20,000.00					
Transportation and storage of perishable farm products.....		75,000.00	75,000.00	75,000.00		
Market news service on fruits, etc.....	314,600.00	750,000.00	346,080.00	324,840.00		
Market reports on live stock and meats.....	89,320.00					
Food supply investigations.....	45,620.00	40,920.00			4,700.00	
Market inspection of perishable foods.....	141,700.00	225,000.00	83,300.00	84,860.00		
Cotton standard investigations.....	14,140.00	12,540.00			1,600.00	
Cotton testing.....	25,860.00	25,860.00				
State cooperation in marketing.....	70,000.00	70,000.00				
Grain investigations.....	71,150.00	69,950.00			1,200.00	
American agricultural products.....		100,000.00	100,000.00	67,100.00		
Enforcement of the standard container act.....	3,800.00				3,800.00	3,800.00
Crop estimates.....		590,741.00	590,741.00	422,665.00		
Administrative expenses.....	20,635.00	30,000.00	9,365.00			10,635.00

Comparison of estimates of appropriations for 1922 with appropriations made for 1921—Continued.

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BUREAU OF MARKETS—continued.						
Enforcement of the cotton-futures act.....	\$142,611.00	\$142,611.00		\$3,780.00		
Enforcement of the grain-standards act.....	538,623.00	728,850.00	\$190,227.00	199,567.00		
Administration of the warehouse act.....	35,000.00	100,000.00	65,000.00	39,000.00		
Enforcement of the standard container act.....		4,800.00	4,800.00	4,800.00		
Salaries and expenses, Wool Division.....	15,000.00	15,000.00				
A net increase of \$1,680,433.	2,538,709.00	4,219,142.00	1,691,733.00	1,520,192.00	\$11,300.00	\$14,435.00
INSECTICIDE AND FUNGICIDE BOARD.						
Statutory salaries.....	30,350.00	33,770.00	3,420.00	1,820.00		
General expenses.....	117,000.00	150,000.00	33,000.00	34,600.00		
A net increase of \$36,420.	147,350.00	183,770.00	36,420.00	36,420.00		
FEDERAL HORTICULTURAL BOARD.						
Statutory salaries.....	33,300.00	57,240.00	23,940.00			
General expenses:						
Enforcement of the plant quarantine act.....	125,450.00	163,410.00	37,960.00	50,000.00		
Extermination of the potato wart.....	35,300.00	35,300.00				
A net increase of \$50,000.	194,050.00	255,950.00	61,900.00	50,000.00		
MISCELLANEOUS.						
Demonstrations on reclamation projects.....	30,000.00	48,600.00	18,600.00	18,600.00		
Fighting and preventing forest fires.....	300,000.00				300,000.00	300,000.00
Northern Pacific land-grant reconnoissance.....		50,000.00	50,000.00	50,000.00		
Cooperative fire protection of forested watersheds of navigable streams.....	125,000.00	125,000.00				
Experiments and demonstrations in live-stock production in the cane-sugar and cotton districts of the United States.....	46,500.00	67,500.00	21,000.00	21,000.00		
Experiments in dairying and live-stock production in semiarid and irrigated districts of the western United States.....	40,000.00	50,000.00	10,000.00	10,000.00		
Peat and muck land investigations.....		50,000.00	50,000.00	50,000.00		
Eradication of foot-and-mouth and other contagious diseases of animals.....	50,000.00	1,000,000.00	950,000.00	950,000.00		
Eradication of pink bollworm.....	488,560.00	666,660.00	178,100.00	190,000.00		
Prevention of spread of European corn borer.....	400,000.00				400,000.00	400,000.00
Field station, Woodward, Okla.....	10,000.00				10,000.00	10,000.00
Short-time rural credits committee.....	5,000.00				5,000.00	5,000.00
Construction of vault for refrigerating plant.....		25,000.00	25,000.00	25,000.00		
Emergency control of unexpected insect outbreak.....		100,000.00	100,000.00	100,000.00		
Total agricultural bill.....	31,712,784.00	41,989,384.00	11,876,502.00	11,510,241.00	1,599,902.00	1,528,317.00
Permanent annual appropriations.....	28,235,000.00	11,750,000.00			16,485,000.00	
Cooperative construction of rural post roads (Post Office appropriation bill, fiscal year 1920).....	75,000,000.00				75,000,000.00	
Federal forest road construction (Post Office appropriation bill, fiscal year 1920).....	3,000,000.00				3,000,000.00	
Protection of lands involved in California and Oregon railroad forfeiture suit (sundry civil).....	25,000.00	25,000.00				
Printing and binding (sundry civil).....	600,000.00	800,000.00	200,000.00	200,000.00		
Grand total of all appropriations for the Department of Agriculture.....	138,572,784.00	54,564,384.00	12,076,502.00	11,710,241.00	96,084,902.00	1,528,317.00

ESTIMATES OF APPROPRIATIONS REQUIRED FOR THE SERVICE OF THE FISCAL YEAR ENDING JUNE
30, 1922, BY THE DEPARTMENT OF AGRICULTURE.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<p style="text-align: center;">DEPARTMENT OF AGRICULTURE.</p> <p>NOTE.—In the following estimates for the Department of Agriculture new matter appearing in miscellaneous appropriations has been indicated by means of <i>italics</i>, and all matter to be dropped has been inclosed in brackets, thus [].</p> <p style="text-align: center;">OFFICE OF THE SECRETARY.</p> <p><i>Salaries, Office of the Secretary of Agriculture—</i></p> <p>(1) Secretary of Agriculture (<i>R. S., p. 87, secs. 520–523; acts Feb. 9, 1889, vol. 25, p. 659, sec. 3; Mar. 2, 1889, vol. 25, p. 835, sec. 3; Feb. 26, 1907, vol. 34, p. 1256, sec. 4; May 31, 1920, vol. 41, pp. 694, 695, sec. 1</i>) ----- \$12, 000. 00</p> <p>(2) Assistant Secretary of Agriculture (increase of \$2,500) (<i>same acts</i>) ----- 7, 500. 00</p> <p>NOTE.—The salary of the Assistant Secretary has not been increased since 1907, notwithstanding the changes in economic conditions that have taken place not only since the outbreak of the European war but even before that time. The present compensation attached to the position is entirely too low and is considerably less than that paid to the deans and directors of many of the agricultural colleges in the various States. It is recommended in these estimates that the salaries of many of the chiefs of bureaus be increased to \$7,500 per annum and the Assistant Secretary should be paid at least an equal amount. See note under item 1, page 19.</p> <p>(3) One director of scientific work (<i>submitted</i>) ----- 7, 500. 00</p> <p>NOTE.—The Department of Agriculture has been properly described as the greatest scientific institution in the world. Through its various bureaus it is conducting fundamental research work upon vital problems not only in the field of agriculture but also in the field of forestry and highway engineering. The importance of this work can not be overestimated. Research is the foundation of progress along these lines. Without it many of our agricultural and other activities could not exist under present conditions and others would be seriously crippled. All our most important projects along control lines are based on years of patient research. Swine production, in a large way, is dependent upon hog cholera control; the cattle industry upon tuberculosis eradication, and in the South upon cattle-tick eradication; the fruit industry upon scientific methods for the protection of both trees and fruit; many field and truck crops upon methods of disease control, the introduction and development of new varieties, and the working out of improved cultural methods and practices. The solution of many technical problems involved in the utilization of farm products in many industries requires years of research, as does the development of improved methods for utilizing the products of our forests. Fundamental research relating to the problems of highway construction and maintenance is essential to the proper development of our highway system and the wise expenditure of the funds that have been provided for the purpose. Research also is necessary to the effective execution of practically all the regulatory statutes intrusted to the department for administration.</p> <p>With the growth and development of the work of the department, it is highly desirable that all its research activities be coordinated through a central agency. Only in this way can the most effective results be secured. Furthermore, it is essential that every effort be made to bring about a further correlation of these activities with those of the appropriate State agricultural agencies. The department has no adequate machinery at this time for accomplishing these purposes and it is urgently recommended, therefore, that provision be made for the appointment of a director of scientific work. All State experiment stations and other like research agencies are presided over by similar officers who correlate and direct their operations. It would be impossible to secure for less than</p>		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large, or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>Salaries, Office of the Secretary of Agriculture—Continued.</i>		
<p>\$7,500 a man with the requisite education, training, and experience, who can work in harmony with the various branches of the department and the agricultural colleges and experiment stations, and who can take the leadership in the development of the scientific work of the department. It may be added that the executive committee of the Land Grant College Association, which comprises within its membership representatives of all the agricultural colleges and experiment stations, has urgently recommended the appointment of such an officer, who will be in position to devote his time and attention to the development of closer relations between the department, the colleges, and the stations.</p> <p>It is proposed that the director of scientific work shall serve during good behavior (see item 4½). The reason for this is obvious. In a scientific institution such as the Department of Agriculture stability of tenure of office of the scientific workers is absolutely essential if the best results are to be secured, and the same would be true of the officer responsible for the direction of the scientific work.</p>		
(4) One director of regulatory work (<i>submitted</i>).....	\$7, 500. 00	
<p>NOTE.—The Department of Agriculture is charged with the administration of more than 30 regulatory statutes, including the food and drugs act, the meat inspection act, the 28-hour law, the animal quarantine acts, the virus-serum-toxin act, the Lacey Act, the migratory bird law, the seed importation act, the insecticide act, the plant quarantine act, the Federal warehouse act, the cotton futures act, the grain standards act, the standard container act, and other laws of far-reaching importance to the department. It is also responsible for the administration of the national forests and for the proper enforcement of the numerous laws relating to them, as well as the execution of the Federal aid road act, and acts amendatory thereof, which make possible the development of the greatest highway program ever undertaken by any country. Many of these laws have been enacted within the past few years.</p> <p>During the war there were three Assistant Secretaries of Agriculture, but this number has since been reduced to one, and it is impossible under existing conditions for the Secretary's office to handle the many problems arising in connection with the administration of the various regulatory statutes in the most satisfactory way. It is highly essential, therefore, from the standpoint of good administration, that provision be made for the appointment of a director of regulatory work, who will devote his entire time and attention to the handling of these problems. He will see to it also that the regulatory activities of the various bureaus are properly coordinated, in order to avoid duplication of effort and unnecessary expenditure of funds, and that these activities are correlated, to the fullest possible extent, with work along similar lines conducted by State agencies.</p> <p>As in the case of the director of scientific work, and for the same reasons, it is proposed that the director of regulatory work shall serve during good behavior (see item 4½). It would be impossible to secure a man with the requisite training and experience for less than \$7,500.</p>		
(4½) <i>The directors of scientific and regulatory work herein or hereafter appropriated for shall be appointed by the Secretary of Agriculture and hold office during good behavior, and shall not be removed except in accordance with the provisions of section 6 of the act of Aug. 24, 1912 (37 Stat., 555). When authorized by the Secretary of Agriculture the directors of scientific and regulatory work shall have authority to act as Secretary of Agriculture, and shall perform such other duties as may be required by law or prescribed by the Secretary of Agriculture.</i>		
(5) Solicitor (increase of \$2,500) (<i>R. S., p. 87, secs. 520-523; acts Feb. 9, 1889, vol. 25, p. 659, sec. 3; Mar. 2, 1889, vol. 25, p. 835, sec. 3; Feb. 26, 1907, vol. 34, p. 1256, sec. 4; May 31, 1920, vol. 41, pp. 694, 695, sec. 1</i>).....	7, 500. 00	
<p>NOTE.—The responsibilities of this position have greatly increased during the past few years, due principally to the enactment of a large amount of new legislation, namely, the cotton-futures act, the grain standards act, the warehouse act, the Federal aid road act, and the net weight and Sherley amendments to the food and drugs act. The department is also charged with the administration and enforcement of the food and drugs act, the meat inspection act, the 28-hour act, the cattle quar-</p>		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large, or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>Salaries Office of the Secretary of Agriculture—Continued.</i>		
<p>antine acts, the diseased animal transportation acts, the virus-serum-toxin act, the Lacey Act, the migratory bird act, the Weeks forestry law, the seed importation act, the insecticide act, and the plant quarantine act and laws relating to the national forests, all of which involve legal phases of a complex nature. The salary of the Solicitor has not been increased since July 1, 1911, notwithstanding the great economic changes that have taken place not only since the outbreak of the European war, but even before that time. The present compensation attached to the position is considerably less than that paid to the legal officers in some of the other branches of the Government service, including the Federal Trade Commission and the Department of Justice, and it is urgently hoped that the department's recommendation will be approved. See also note under item 1, page 19.</p>		
<p>(6) Chief clerk, \$3,500, and \$500 additional as custodian of buildings (increase of \$500) (<i>R. S.</i>, p. 87, secs. 520-523; acts Feb. 9, 1889, vol. 25, p. 659, sec. 3; Mar. 2, 1889, vol. 25, p. 835, sec. 3; Feb. 26, 1907, vol. 34, p. 1256, sec. 4; May 31, 1920, vol. 41, pp. 694, 695, sec. 1)</p>	\$4, 000. 00	
<p>NOTE.—The salary of the chief clerk of the Department of Agriculture has remained at \$3,500 for many years, whereas the compensation of the chief clerks of the War, Interior, Post Office, and Justice Departments, whose duties and responsibilities are no greater, has been increased to \$4,000. The present incumbent is a very efficient officer, has been in the service over 30 years, and has received no promotion since 1913.</p>		
(7) Private secretary to the Secretary of Agriculture (<i>same acts</i>) ..	2, 500. 00	
(8) Executive clerk (<i>same acts</i>)	2, 250. 00	
(9) Executive clerk (<i>same acts</i>)	2, 100. 00	
(10) Stenographer and executive clerk to the Secretary of Agriculture (<i>same acts</i>)	2, 250. 00	
(11) Private secretary to the Assistant Secretary of Agriculture (<i>same acts</i>)	2, 250. 00	
(12) One appointment clerk (<i>same acts</i>)	2, 000. 00	
(13) One officer in charge of supplies (<i>same acts</i>)	2, 000. 00	
(14) One inspector (increase of \$600) (<i>same acts</i>)	3, 600. 00	
<p>NOTE.—This employee is in charge of the office of inspection, which investigates charges of misconduct on the part of employees, reviews all personnel matters requiring consideration by the Secretary, handles the accounting work of the Office of the Secretary, supervises the financial procedure of the department, and prepares important financial reports for submission by the Secretary to Congress. He is an exceptionally capable officer, has served 25 years in the department, and has received only one promotion since 1912. It is earnestly hoped that the department's recommendation will be approved.</p>		
(15) One inspector (<i>same acts</i>)	2, 250. 00	
(16) One attorney (<i>submitted</i>)	4, 000. 00	
<p>NOTE.—This position and 1 attorney at \$3,000 are submitted in lieu of 2 law clerks, at \$1,800 each, and 2 law clerks, at \$1,600 each. During the past year there have been 7 resignations among the lawyers of the Solicitor's office, and 2 others have indicated their purpose to leave the service. Some of these lawyers were drawing the higher salaries. Under the present salary scale it has been very difficult to maintain the legal force at its past standard of efficiency. It is essential, if the senior lawyers are to be retained, that increases in the higher positions be made. If these new places are allowed it will be possible to promote 2 of the Solicitor's principal assistants and, as an incident, to increase the salaries of other deserving lawyers. See also note under item 26.</p>		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large, or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>Salaries, Office of the Secretary of Agriculture—Continued.</i>		
(17) One attorney (<i>R. S.</i> , p. 87, secs. 520-523; acts Feb. 9, 1889, vol. 25, p. 659, sec. 3; Mar. 2, 1889, vol. 25, p. 835, sec. 3; Feb. 26, 1907, vol. 34, p. 1256, sec. 4; May 31, 1920, vol. 41, pp. 694, 695; sec. 1)-----	\$3, 500. 00	
(18) Two attorneys, at \$3,250 each (<i>same acts</i>)-----	6, 500. 00	
(19) One attorney (<i>submitted</i>)-----	3, 000. 00	
NOTE.—See note under item 16.		
(20) Two law clerks, at \$3,000 each (<i>R. S.</i> , p. 87, secs. 520-523; acts Feb. 9, 1889, vol. 25, p. 659, sec. 3; Mar. 2, 1889, vol. 25, p. 835, sec. 3; Feb. 26, 1907, vol. 34, p. 1256, sec. 4; May 31, 1920, vol. 41, pp. 694, 695; sec. 1)-----	6, 000. 00	
(21) Two law clerks, at \$2,750 each (<i>same acts</i>)-----	5, 500. 00	
(22) Four law clerks, at \$2,500 each (<i>same acts</i>)-----	10, 000. 00	
(23) Eight law clerks, at \$2,250 each (<i>same acts</i>)-----	18, 000. 00	
(24) One law clerk (<i>same acts</i>)-----	2, 200. 00	
(25) Five law clerks, at \$2,000 each (<i>same acts</i>)-----	10, 000. 00	
(26) One law clerk (decrease of 2) (<i>same acts</i>)-----	1, 800. 00	
NOTE.—These two places and the two places in item 27 are dropped, as it has been impossible to find men willing to accept these small salaries who are capable of rendering the character of service required of them. These four places are now vacant. See note under item 16.		
(27) [Two law clerks, at \$1,600 each.]		
NOTE.—See notes under items 16 and 26.		
(28) One superintendent of telegraph and telephones (increase of \$500) (<i>same acts</i>)-----	2, 500. 00	
NOTE.—This employee acts under the direction of the chief clerk as the administrative head of the telegraph and telephone activities of the department. He arranges for the necessary wire connections and the installation, operation, and maintenance of the telegraph and telephone equipment. Under his direction the wire service of the department has been greatly improved. The salary attached to this position is much lower than that paid for similar services in other departments or by commercial companies.		
(29) One telegraph and telephone operator (<i>same acts</i>)-----	1, 600. 00	
(30) One assistant chief clerk and captain of the watch (increase of \$450) (<i>same acts</i>)-----	2, 250. 00	
NOTE.—There has been no increase in the salary of the assistant chief clerk since 1914. This employee handles the routine business of the chief clerk's office and becomes acting chief clerk in the absence of the chief clerk. As captain of the watch, he directs the operation of a force of 96 watchmen guarding 29 buildings. In all other departments the position of captain of the watch is separately provided for.		
(31) One clerk (<i>same acts</i>)-----	2, 000. 00	
(32) Five clerks, class 4 (<i>same acts</i>)-----	9, 000. 00	

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large, or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>Salaries, Office of the Secretary of Agriculture—Continued.</i>		
(33) Thirteen clerks, class 3 (decrease of 1 by transfer to statutory roll, Division of Publications) (<i>R. S., p. 87, secs. 520-523; acts Feb. 9, 1889, vol. 25, p. 659, sec. 3; Mar. 2, 1889, vol. 25, p. 835, sec. 3; Feb. 26, 1907, vol. 34, p. 1256, sec. 4; May 31, 1920, vol. 41, pp. 694, 695, sec. 1</i>)-----	\$20, 800. 00	
NOTE.—One clerk of class 3, carried on the roll of the Secretary's office, is at present detailed to the Division of Publications, where she has been employed continuously in keeping accounts for the office of exhibits, which office was transferred to the Division of Publications on July 1, 1920. Her services are permanently needed there and the transfer of the position is therefore recommended.		
(34) Seventeen clerks, class 2 (<i>same acts</i>)-----	23, 800. 00	
(35) Thirty-one clerks, class 1 (<i>same acts</i>)-----	37, 200. 00	
(36) One accountant and bookkeeper (<i>same acts</i>)-----	2, 000. 00	
(37) One clerk (<i>same acts</i>)-----	1, 440. 00	
(38) Two clerks, at \$1,100 each (<i>same acts</i>)-----	2, 200. 00	
(39) One clerk (<i>same acts</i>)-----	1, 020. 00	
(40) Four clerks, at \$1,000 each (decrease of 1) (<i>same acts</i>)-----	4, 000. 00	
NOTE.—See note under item 57.		
(41) Six clerks, at \$900 each (decrease of 1) (<i>same acts</i>)-----	5, 400. 00	
NOTE.—See note under item 47.		
(42) Five messengers or laborers, at \$960 each (<i>submitted</i>)-----	4, 800. 00	
NOTE.—These new places are submitted in lieu of 10 messenger boys, at \$480 each. It has been impossible to keep all these places filled because of the low salary, and it is believed that the messenger service of the Secretary's office can be adequately conducted with a reduced number of messenger boys. With a somewhat higher salary it is hoped to secure and retain satisfactory employees of the laborer class. See item 66.		
(43) Eleven messengers or laborers, at \$840 each (decrease of 3) (<i>R. S., p. 87, secs. 520-523; acts Feb. 9, 1889, vol. 25, p. 659, sec. 3; Mar. 2, 1889, vol. 25, p. 835, sec. 3; Feb. 26, 1907, vol. 34, p. 1256, sec. 4; May 31, 1920, vol. 41, pp. 694, 695, sec. 1</i>)-----	9, 240. 00	
NOTE.—See note under item 47.		
(44) Seven messengers or laborers, at \$720 each (decrease of 5 by transfer to lump fund) (<i>same acts</i>)-----	5, 040. 00	
NOTE.—See note under item 73.		
(45) One messenger or laborer (<i>same acts</i>)-----	660. 00	
(46) [One mechanical superintendent, \$2,500; 1 mechanical assistant, \$1,800; 1 mechanical assistant, \$1,400; 1 mechanical assistant, \$1,380; 1 engineer, \$1,400; 1 electrical engineer and draftsman, \$1,200; 1 chief engineer, \$1,800; 2 assistant engineers, at \$1,200 each; 2 assistant engineers, at \$1,000 each; 10 firemen, at \$1,080 each; 1 fireman, \$840; 4 firemen, at \$720 each; 1 chief elevator conductor, \$840; 16 elevator conductors, at \$720 each; 3 elevator conductors,		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large, or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>Salaries, Office of the Secretary of Agriculture—Continued.</i>		
<p>at \$600 each; 1 superintendent of shops, \$1,400; 1 cabinet shop foreman, \$1,200; 5 cabinetmakers or carpenters, at \$1,200 each; 3 cabinetmakers or carpenters, at \$1,100 each; 9 cabinetmakers or carpenters, at \$1,020 each; 3 cabinetmakers or carpenters, at \$900 each; 1 instrument maker, \$1,200; 1 electrician, \$1,100; 2 electrical wiremen, at \$1,100 each; 1 electrician or wiremen, \$1,000; 1 electrical wireman, \$900; 1 electrician's helper, \$840; 3 electrician's helpers, at \$720 each; 1 painter, \$1,020; 1 painter, \$1,000; 5 painters, at \$900 each; 5 plumbers or steamfitters, at \$1,020 each; 2 plumber's helpers, at \$840 each; 2 plumber's helpers, at \$720 each; 1 blacksmith, \$900; 1 elevator machinist, \$1,200; 1 tinner or sheet-metal worker, \$1,100; 1 tinner's helper, \$720, transferred to lump fund.】</p> <p>NOTE.—These places, together with those in items 44, 53, 54, 59, 60, 61, and 1 messenger or laborer at \$600, under item 63, are transferred to the proposed lump-fund item for salaries and compensation of employees in the mechanical shops and power plant of the department. See note under item 73.</p>		
(47) Two lieutenants of the guard, at \$1,440 each (<i>submitted</i>) . . .	\$2,880.00	
<p>NOTE.—These new places, together with those in items 48 and 49, are submitted in lieu of the places dropped in items 41, 43, 50, 51, and 52, office of the Secretary, 4 watchmen, at \$720 each, statutory roll of the Weather Bureau, and 4 watchmen, at \$840 each, statutory roll of the Forest Service. This readjustment provides for the centralization of the entire watch force of the department in the office of the Secretary. At present independent forces are maintained by the Forest Service and the Weather Bureau.</p> <p>The proposed change involves an increase in the salary roll of \$33,140 and the addition of one new place. The present scale of salaries for watchmen in the Department of Agriculture is too low, considering the responsibilities of the positions and the compensation for similar services elsewhere. Existing economic conditions and the reasonable requirements of the department respecting personal appearance, etc., render it difficult, with the most rigid economy, for this class of employees to conform to the ordinary standards of living.</p> <p>If this readjustment is approved, it is proposed to promote the two lieutenants of the watch at \$960 on the Secretary's roll to lieutenants of the guard at \$1,440 each; to change 1 lieutenant at \$1,000, 1 clerk at \$900, and 3 messengers or laborers at \$840 each, on the Secretary's roll, to sergeants of the guard at \$1,320 each; to change 73 watchmen at \$720 each on the Secretary's roll, 4 watchmen at \$720 each on the statutory roll of the Weather Bureau, and 4 watchmen at \$840 each on the statutory roll of the Forest Service to guards at \$1,080 each; and to add one new place as guard at \$1,080.</p>		
(48) Six sergeants of the guard, at \$1,320 each (<i>submitted</i>)	7,920.00	
NOTE.—See note under item 47.		
(49) Eighty-one guards, at \$1,080 each (<i>submitted</i>)	87,480.00	
NOTE.—See note under item 47.		
(50) 【One lieutenant of the watch, \$1,000.】		
NOTE.—See note under item 47.		
(51) 【Two lieutenants of the watch, at \$960 each.】		
NOTE.—See note under item 47.		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large, or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>Salaries, Office of the Secretary of Agriculture—Continued.</i>		
(52) 【Seventy-three watchmen, at \$720 each.】		
NOTE.—The 1 lieutenant of the watch, \$1,000; 2 lieutenants of the watch, at \$960 each; 73 watchmen, at \$720 each; 1 clerk, \$900, and 3 messengers or laborers, at \$840 each, have been changed to 2 lieutenants of the guard, at \$1,440 each; 6 sergeants of the guard, at \$1,320 each; and 81 guards, at \$1,080 each, as above, with increase of \$33,140. Included in these grades are also 4 watchmen, at \$720 each, transferred from the statutory roll of the Weather Bureau, and 4 watchmen, at \$840 each, transferred from the statutory roll of the Forest Service, which rolls have been reduced accordingly. See note under item 47.		
(53) 【Four mechanics, at \$1,200 each, transferred to lump fund.】		
NOTE.—See notes under items 46 and 73.		
(54) 【One mechanic, \$1,000, transferred to lump fund.】		
NOTE.—See note under item 73.		
(55) One foreman of stable (<i>R. S., p. 87, secs. 520–523; acts Feb. 9, 1889, vol. 25, p. 659, sec. 3; Mar. 2, 1889, vol. 25, p. 835, sec. 3; Feb. 26, 1907, vol. 34, p. 1256, sec. 4; May 31, 1920, vol. 41, pp. 694, 695, sec. 1</i>) -----	\$1, 080. 00	
(56) Two skilled laborers, at \$1,080 each (<i>submitted</i>) -----	2, 160. 00	
NOTE.—These new places are requested in lieu of 4 messengers or laborers at \$600 each (see item 63), and will provide for the promotion of the carriage driver and the messenger of the Secretary of Agriculture, both of whom are now receiving \$960. The former has been in the department for 28 years. Both have rendered faithful service, the latter being required to perform much overtime work.		
(57) Two skilled laborers, at \$1,000 each (increase of 1) (<i>R. S., p. 87, secs. 520–523; acts Feb. 9, 1889, vol. 25, p. 659, sec. 3; Mar. 2, 1889, vol. 25, p. 835, sec. 3; Feb. 26, 1907, vol. 34, p. 1256, sec. 4; May 31, 1920, vol. 41, pp. 694, 695, sec. 1</i>) --	2, 000. 00	
NOTE.—One additional place as skilled laborer is submitted in lieu of one clerk, at \$1,000. The employee occupying this position performs the duties of a skilled laborer and should have that designation. See item 40.		
(58) Three skilled laborers, at \$960 each (<i>same acts</i>) -----	2, 880. 00	
(59) One skilled laborer (decrease of 1 by transfer to lump fund) (<i>same acts</i>) -----	900. 00	
NOTE.—See notes under items 46 and 73.		
(60) 【Two skilled laborers, at \$840 each, transferred to lump fund.】		
NOTE.—See notes under items 46 and 73.		
(61) 【Two skilled laborers, at \$720 each, transferred to lump fund.】		
NOTE.—See notes under items 46 and 73.		
(62) One janitor (<i>same acts</i>) -----	900. 00	
(63) Eight messengers or laborers, at \$600 each (decrease of 5, 1 by transfer to lump fund and 4 dropped) (<i>same acts</i>) ----	4, 800. 00	
NOTE.—One of these places has been transferred to the lump fund item for the mechanical shop force and the other 4 places have been changed to 2 laborers, at \$1,080 each. See notes under items 46, 56, and 73.		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large, or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.		
<i>Salaries, Office of the Secretary of Agriculture—Continued.</i>				
(64) One messenger boy (by transfer from statutory roll, Division of Publications) (<i>R. S.</i> , p. 87, secs. 520-523; <i>acts Feb. 9, 1889, vol. 25, p. 659, sec. 3; Mar. 2, 1889, vol. 25, p. 835, sec. 3; Feb. 26, 1907, vol. 34, p. 1256, sec. 4; May, 31, 1920, vol. 41, pp. 694, 695, sec. 1</i>)	\$720. 00			
NOTE.—This employee is at present detailed to the Secretary's office from the Division of Publications, and his services will be permanently needed. The transfer of the position to this office is therefore recommended.				
(65) Seven messenger boys, at \$600 each (<i>same acts</i>)	4, 200. 00			
(66) Ten messenger boys, at \$480 each (decrease of 12, 2 by transfer to statutory roll, Division of Publications, and 10 dropped) (<i>same acts</i>)	4, 800. 00			
NOTE.—The reason for dropping 10 of these places is stated in the note under item 42. The two messenger boys transferred to the Division of Publications are performing services in that division on detail from the Secretary's office. Their services will be permanently needed in the Division of Publications.				
(67) [One messenger boy, \$360.]				
NOTE.—This place has been vacant for some time, the salary being too low to attract applicants. It is therefore proposed to drop the position.				
(68) One charwoman (<i>same acts</i>)	540. 00			
(69) Three charwomen, at \$480 each (<i>same acts</i>)	1, 440. 00			
(70) One charwoman (<i>same acts</i>)	360. 00			
(71) Sixteen charwomen, at \$240 each (<i>same acts</i>)	3, 840. 00			
(72) For extra labor and emergency employments (<i>same acts</i>) . . .	12, 480. 00			
	\$414, 030. 00	\$465, 260. 00		
Appropriation for 1912.....	\$276, 450	Estimate for 1913.....	\$287, 300	
Appropriation for 1913.....	292, 280	Estimate for 1914.....	305, 570	
Appropriation for 1914.....	308, 820	Estimate for 1915.....	332, 380	
Appropriation for 1915.....	339, 880	Estimate for 1916.....	354, 280	
Appropriation for 1916.....	352, 040	Estimate for 1917.....	402, 600	
Appropriation for 1917.....	402, 350	Estimate for 1918.....	422, 070	
Appropriation for 1918.....	412, 010	Estimate for 1919.....	465, 120	
Appropriation for 1919.....	462, 000	Estimate for 1920.....	491, 720	
Appropriation for 1920.....	500, 520	Estimate for 1921.....	475, 860	
Appropriation for 1921.....	465, 260	Estimate for 1922.....	414, 030	
NOTE.—Apparent decrease, \$51,230; actual increase, \$59,190, as follows:				
<i>Promotions.</i>				
Assistant Secretary of Agriculture, from \$5,000 to \$7,500.....				\$2, 500
Solicitor, from \$5,000 to \$7,500.....				2, 500
Chief clerk, from \$3,500 to \$4,000.....				500
1 inspector, from \$3,000 to \$3,600.....				600
1 superintendent of telegraph and telephones, from \$2,000 to \$2,500.....				500
1 assistant chief clerk and captain of the watch, from \$1,800 to \$2,250.....				450
				<hr/>
				\$7, 050
<i>New places.</i>				
1 director of scientific work.....				7, 500
1 director of regulatory work.....				7, 500
1 attorney.....				4, 000
1 attorney.....				3, 000
5 messengers or laborers, at \$960 each.....				4, 800
2 lieutenants of the guard, at \$1,440 each.....				2, 880
6 sergeants of the guard, at \$1,320 each.....				7, 920
81 guards, at \$1,080 each.....				87, 480
2 skilled laborers, at \$1,080 each.....				2, 160
1 skilled laborer.....				1, 000
				<hr/>
				128, 240
				<hr/>
				\$135, 290

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large, or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>Salaries, Office of the Secretary of Agriculture—Continued.</i>		
<i>Transfers to statutory roll, Division of Publications.</i>		
1 clerk, class 3.....	\$1,600	
2 messenger boys, at \$480 each.....	960	
	2,560	
<i>Transfer from statutory roll, Division of Publications.</i>		
1 messenger boy.....	720	
	\$1,840	
<i>Places dropped.</i>		
2 law clerks, at \$1,800 each.....	3,600	
2 law clerks, at \$1,600 each.....	3,200	
1 clerk.....	1,000	
1 clerk.....	900	
3 messengers or laborers, at \$840 each.....	2,520	
1 lieutenant of the watch.....	1,000	
2 lieutenants of the watch, at \$960 each.....	1,920	
73 watchmen, at \$720 each.....	52,560	
4 messengers or laborers, at \$600 each.....	2,400	
10 messenger boys, at \$480 each.....	4,800	
1 messenger boy.....	360	
	74,260	
	\$76,100	
Actual increase.....		59,190
<i>Places transferred to new lump-fund item "Mechanical shops and power plant," and statutory roll of the Office of the Secretary reduced accordingly.</i>		
5 messengers or laborers, at \$720 each.....	3,600	
1 mechanical superintendent.....	2,500	
1 mechanical assistant.....	1,800	
1 mechanical assistant.....	1,400	
1 mechanical assistant.....	1,380	
1 engineer.....	1,400	
1 electrical engineer and draftsman.....	1,200	
1 chief engineer.....	1,800	
2 assistant engineers, at \$1,200 each.....	2,400	
2 assistant engineers, at \$1,000 each.....	2,000	
10 firemen, at \$1,080 each.....	10,800	
1 fireman.....	840	
4 firemen, at \$720 each.....	2,880	
1 chief elevator conductor.....	840	
16 elevator conductors, at \$720 each.....	11,520	
3 elevator conductors, at \$600 each.....	1,800	
1 superintendent of shops.....	1,400	
1 cabinet shop foreman.....	1,200	
5 cabinetmakers or carpenters, at \$1,200 each.....	6,000	
3 cabinetmakers or carpenters, at \$1,100 each.....	3,300	
9 cabinetmakers or carpenters, at \$1,020 each.....	9,180	
3 cabinetmakers or carpenters, at \$900 each.....	2,700	
1 instrument maker.....	1,200	
1 electrician.....	1,100	
2 electrical wiremen, at \$1,100 each.....	2,200	
1 electrician or wireman.....	1,000	
1 electrical wireman.....	900	
1 electrician's helper.....	840	
3 electrician's helpers, at \$720 each.....	2,160	
1 painter.....	1,020	
1 painter.....	1,000	
5 painters, at \$900 each.....	4,500	
5 plumbers or steam fitters, at \$1,020 each.....	5,100	
2 plumber's helpers, at \$840 each.....	1,680	
2 plumber's helpers, at \$720 each.....	1,440	
1 blacksmith.....	900	
1 elevator machinist.....	1,200	
1 tinner or sheet-metal worker.....	1,100	
1 tinner's helper.....	720	
4 mechanics, at \$1,200 each.....	4,800	
1 mechanic.....	1,000	
1 skilled laborer.....	900	
2 skilled laborers, at \$840 each.....	1,680	
2 skilled laborers, at \$720 each.....	1,440	
1 messenger or laborer.....	600	
	110,420	
Apparent decrease.....		51,230

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large, or to Revised Statutes, and estimated amount required for each detailed object.					Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>Salaries, Office of the Secretary of Agriculture—Continued.</i>						
<i>Extra labor and emergency employment.</i>						
Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.		
Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>		
Assistant in exhibits.....per annum..	\$2,700.00			1		
Private secretary to the Assistant Secretary.....do....	2,000.00			1		
Superintendent of telegraph and telephones.....do....	2,000.00			1		
Chief engineer.....do....	1,800.00			1		
Clerk, temporary, \$1,800 to \$1,000.....do....		11	11	17		
Stable foreman.....do....	1,080.00			1		
Chauffeur.....do....	960.00			1		
Clerk, watchmen, telephone operators, messenger boy, charwoman, and collaborators, temporary, \$900 to \$12.....do....		27	27	27		
Relief watchmen (average service 37 days each), \$2.50 to \$2.....per diem..		50	50	50		
Wages:						
Laborer.....per annum..	720.00	1	1	1		
Carpenter, steam fitter, painter, firemen, electrical wireman, tinner, and automobile mechanic's helper, temporary—\$1,200 to \$1,000.....per annum..				13		
\$6 to \$2.....per diem..		10	10	12		
Miscellaneous temporary labor—\$75 to \$40.....per month..		10	10	5		
\$4 to \$3.....per diem..				2		
		109	109	133		
Salaries.....		\$7,000.00	\$7,000.00	\$14,118.78		
Wages.....		5,480.00	5,480.00	5,548.80		
Total.....		12,480.00	12,480.00	19,667.58		
<i>Mechanical Shops and Power Plant—</i>						
(73) <i>For salaries and compensation of necessary employees in the mechanical shops and power plant of the Department of Agriculture, \$120,000: Provided, That hereafter the Secretary of Agriculture may, by transfer settlement through the Treasury, reimburse any appropriation made for the salaries and compensation of employees in the mechanical shops of the department from the appropriation made for the bureau, office, or division for which any work in said shops is performed, and such reimbursement shall be at the actual cost of such work for supervision and labor (submitted)</i>					\$120,000.00	
NOTE.—It is proposed to transfer to this new lump-fund item the statutory positions on the Secretary's roll listed in items 44, 46, 53, 54, 59, 60, 61, and 1 messenger or laborer at \$600 under item 63, with salaries aggregating \$110,420.						
It is also proposed to carry under this item other mechanics now on the bureau rolls without corresponding reductions in those funds, since the new item for salaries of mechanical employees provides for reimbursement by bureaus for labor actually performed for them.						
The entire mechanical shop force of the department has been underpaid for some years. Practically all places on the shop roll are statutory, and promotions have been comparatively infrequent. It is believed that, as long as a statutory roll for mechanics and other shop and power plant employees is retained, the situation will be unsatisfactory, for the following reasons:						
(1) The statutory roll is not flexible. When vacancies occur the positions can not always be filled by the class of help most needed at a given time.						
(2) The force can not be readily changed to suit the volume of work. This makes it necessary for bureaus to carry on their lump funds extra mechanics to meet the increased volume of work. These extra men, though often not as good mechanics as the regular employees, have to be paid the prevailing rates. This naturally causes dissatisfaction among the regular men who receive lower compensation for doing a better class of work.						

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large, or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>Mechanical Shops and Power Plant—Continued.</i>		
(3) It is impossible to get good mechanics to accept the low entrance salaries. Hence there is loss of efficiency to the department and increased difficulty in securing men who can do the high-class work required of them.		
(4) Rates of pay do not follow commercial rates. The Government Printing Office, Bureau of Engraving and Printing, and Washington Navy Yard carry their mechanical forces on lump-sum rolls on a per diem basis. Their rates of pay are much in excess of those prevailing in the Department of Agriculture. Those departments have increased the rates of pay of their mechanics as the demand for labor has increased during the past two years, while the rates paid the Department of Agriculture's force have remained stationary.		
(5) Under the present statutory roll arrangement, the particular project desiring mechanical work can not be charged for labor performed in the manufacture of scientific apparatus, equipment, etc. Hence the tendency is to increase the amount of work performed by the mechanical shops over what would be required if the cost were charged against the appropriation of the particular project requesting the work.		
The plan proposed would have the following advantages:		
(a) The shops' relations with the bureaus would be on a business basis. Each bureau would pay by reimbursement monthly for all work performed by the mechanical shops on its projects. Hence funds would be automatically provided for such additions to the mechanical force as might be necessary to provide for increased volume of work desired by the bureaus.		
(b) Each project would be charged for the actual work done on the design and construction of scientific apparatus and equipment. Hence reports of expenditure on these projects would more accurately show the actual money expended.		
(c) The number and kind of mechanics could be varied to exactly suit the requirements of the work.		
(d) The salaries of the mechanical force, within reasonable limits, could be changed from time to time to suit the varying labor conditions, and a contented and efficient working force could always be secured.		
<i>Statement of clerks employed in the District of Columbia under lump-fund appropriations for 30 days or more during the fiscal year ended June 30, 1920 (32 Stat., p. 303).</i>		
OFFICE OF THE SECRETARY, EXTRA LABOR AND EMERGENCY EMPLOYMENTS.		
2 clerks, at \$1,800 each per annum. 5 clerks, at \$1,100 each per annum. 1 clerk, \$900 per annum.		
Total for Office of the Secretary of Agriculture	\$534, 030. 00	\$465, 260 00

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large, or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<p>[OFFICE] BUREAU OF FARM MANAGEMENT AND FARM ECONOMICS.</p> <p>NOTE.—It is recommended that the name "Office of Farm Management and Farm Economics" be changed to "Bureau of Farm Management and Farm Economics" in view of the broadened scope of the activities which have been assigned to the bureau and in order to give it an equal rank with other scientific branches of the department having like responsibilities and with which it is called upon to cooperate in conducting its various activities.</p> <p><i>Salaries, [Office] Bureau of Farm Management and Farm Economics—</i></p> <p>(1) One chief of [office] bureau (increase of \$2,500) (<i>R. S., p. 87, secs. 520-523; acts Mar. 4, 1915, vol. 38, p. 1087, sec. 1; May 31, 1920, vol. 41, p. 695, sec. 1</i>) \$7, 500. 00</p> <p>NOTE.—The chiefs of bureaus and divisions in the Department of Agriculture are greatly underpaid. There has been no change in the salaries of these responsible officers for 5, 10, 15, or 20 years, notwithstanding the very great economic changes which have taken place not only since the outbreak of the European war, but even before that time. The salary of the Chief of the Weather Bureau, for example, was fixed at \$5,000 in 1901. It was later increased to \$6,000, but was reduced in 1914 to \$5,000. The salaries of the Chiefs of the Bureau of Animal Industry, the Bureau of Plant Industry, the Forest Service, and the Bureau of Chemistry were fixed at \$5,000 in 1907, and no change has been made in them since that time. Meanwhile large additional duties have been placed by Congress upon these bureaus and other branches of the department, resulting in a corresponding increase in the responsibilities of the officers who administer them.</p> <p>All the bureaus are confronted with tasks of tremendous size and importance. The Chief of the Forest Service, for example, is responsible for the effective administration of all the national forests, including about 155,000,000 acres of land. These lands not only protect our watersheds and provide a timber supply for the future but they also contain approximately one-third of all the water-power possibilities in the United States and support annually more than 11,000,000 animals which are grazed under special permit. The forester also is charged with the responsibility of protecting the forests against fire, with the working out and execution of plans for reforestation, and with the development of the recreational facilities of the forests.</p> <p>The Bureau of Animal Industry is charged with the administration of many important and far-reaching laws, including the meat-inspection act, the animal-quarantine acts, the 28-hour act, the virus-serum-toxin act, and others. It also directs the efforts of a large force of veterinarians engaged in eradicating important animal diseases, such as hog cholera, Texas fever (cattle tick), cattle and sheep scabies, tuberculosis, and the like, and it is conducting highly important and essential investigations looking to the improvement of the live-stock industry of the Nation. There are approximately 5,000 employees in the Bureau of Animal Industry.</p> <p>These cases are cited merely as illustrations; the other branches of the department are responsible for the efficient administration and effective prosecution of vital and important lines of work which are of interest not only to agriculture but to business men and all the people of the Nation.</p> <p>The salaries at present paid to chiefs of bureaus and divisions in the Department of Agriculture are considerably less than those paid to officers of similar rank in other agricultural institutions whose responsibilities are not nearly so great. Most of the deans and directors in the important agricultural colleges and experiment stations are now receiving from \$6,000 to \$10,000 per annum, their salaries having been considerably advanced this year, and many others will be increased when the legislatures meet this winter. In contrast to this only one chief of bureau in the Department of Agriculture receives as much as \$6,000 per annum, while the average is only \$4,680. The minimum professorial salary at Harvard is now \$6,000 and the maximum is \$8,000, and practically all our institutions of higher learning are paying heads of departments \$6,000 or more.</p> <p>In this connection it should be borne in mind that the total appropriations, State and Federal, for all the agricultural experiment stations in the United States is approximately \$5,000,000. To administer this research fund there are approximately 50 directors, receiving an average salary considerably higher than that paid to bureau chiefs in the Department of Agriculture, while the salaries of the 10 leading experiment station directors average more than double the average amount paid to bureau chiefs. Notwithstanding this fact, the latter are responsible for the expenditure of from \$8,000,000 to \$12,000,000 annually for research activities and a much greater amount for regulatory service and other work. As a matter of fact, one bureau chief in the Department of Agriculture is charged with directing the proper expenditure of more research funds than the five largest experiment stations in the United States combined.</p>		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large, or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.																																																						
Salaries, [Office] Bureau of Farm Management and Farm Economics— Continued.																																																								
<p>In comparing the relative salaries of men in the Department of Agriculture and in the colleges and universities it must be borne in mind that university professors are paid on the basis of nine months' service. If they teach in summer school or do other work during the vacation period, they are paid extra for it. Furthermore, many of them have every seventh year with full or half salary for advanced study and research, and others are working under retirement provisions which are much more favorable than those of the Department of Agriculture.</p> <p>The salaries of the bureau chiefs in the Department of Agriculture also are considerably less than the salaries received by other officers of the Federal Government holding positions involving no greater, and in some cases considerably less, responsibility. For example, the Chief of the Office of Farm Management and Farm Economics in the department receives a salary of \$5,000, while the chief economist of the Federal Trade Commission is paid \$7,500 and the chief counsel \$8,000. In the Federal Reserve Board there is a director of the Division of Analysis and Research who is an economist, at \$6,000, while the chiefs of divisions of the board receive \$7,500 and the executive secretary \$10,000. In the Department of Justice the Solicitor General receives \$10,000, the assistant to the Attorney General \$9,000, and six Assistant Attorney Generals \$7,500 each. In the Treasury Department many deputy internal-revenue collectors receive \$5,000 or more, while 24 customs collectors are employed at salaries ranging from \$5,000 to \$8,000 and 1 at \$12,000.</p> <p>In the Department of the Interior the Director of the Reclamation Service receives \$7,500 per annum, while the Chief of the Bureau of Public Roads, who is responsible for the execution of the greatest highway program ever inaugurated by any country, involving the expenditure of State and Federal funds over a period of five years of approximately \$600,000,000, receives only \$6,000 per annum. Many other cases could be cited, but it is unnecessary to do so here.</p> <p>If the Department of Agriculture is to continue to render the most effective service, if it is to continue to justify the responsibilities placed upon it by Congress and the Nation, it must be in a position to pay adequate compensation to its officers and employees, and this is particularly true of the men who are responsible for directing the work of the various bureaus and divisions. It is urgently hoped, therefore, that the Congress will approve the following increases in their salaries, as recommended in the estimates:</p>																																																								
<table> <tr> <th>Bureau.</th><th>Present salary.</th><th>Recommended.</th></tr> <tr><td>Assistant Secretary.....</td><td>\$5,000.00</td><td>\$7,500.00</td></tr> <tr><td>Farm Management.....</td><td>5,000.00</td><td>7,500.00</td></tr> <tr><td>Weather Bureau.....</td><td>5,000.00</td><td>7,500.00</td></tr> <tr><td>Animal Industry.....</td><td>5,000.00</td><td>7,500.00</td></tr> <tr><td>Plant Industry.....</td><td>5,000.00</td><td>7,500.00</td></tr> <tr><td>Forest Service.....</td><td>5,000.00</td><td>7,500.00</td></tr> <tr><td>Chemistry.....</td><td>5,000.00</td><td>7,500.00</td></tr> <tr><td>Markets.....</td><td>5,000.00</td><td>7,500.00</td></tr> <tr><td>Entomology.....</td><td>5,000.00</td><td>7,500.00</td></tr> <tr><td>States Relations.....</td><td>4,500.00</td><td>7,500.00</td></tr> <tr><td>Public Roads.....</td><td>6,000.00</td><td>7,500.00</td></tr> <tr><td>Soils.....</td><td>4,000.00</td><td>6,000.00</td></tr> <tr><td>Biology.....</td><td>4,000.00</td><td>6,000.00</td></tr> <tr><td>Solicitor.....</td><td>5,000.00</td><td>7,500.00</td></tr> <tr><td>Publications.....</td><td>3,500.00</td><td>6,000.00</td></tr> <tr><td>Accounts.....</td><td>4,000.00</td><td>5,000.00</td></tr> <tr><td>Library.....</td><td>2,000.00</td><td>3,600.00</td></tr> </table>	Bureau.	Present salary.	Recommended.	Assistant Secretary.....	\$5,000.00	\$7,500.00	Farm Management.....	5,000.00	7,500.00	Weather Bureau.....	5,000.00	7,500.00	Animal Industry.....	5,000.00	7,500.00	Plant Industry.....	5,000.00	7,500.00	Forest Service.....	5,000.00	7,500.00	Chemistry.....	5,000.00	7,500.00	Markets.....	5,000.00	7,500.00	Entomology.....	5,000.00	7,500.00	States Relations.....	4,500.00	7,500.00	Public Roads.....	6,000.00	7,500.00	Soils.....	4,000.00	6,000.00	Biology.....	4,000.00	6,000.00	Solicitor.....	5,000.00	7,500.00	Publications.....	3,500.00	6,000.00	Accounts.....	4,000.00	5,000.00	Library.....	2,000.00	3,600.00		
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(2) One assistant to the chief (<i>R. S., p. 87, secs. 520-523; acts Mar. 4, 1915, vol. 38, p. 1087, sec. 1; May 31, 1920, vol. 41, p. 695, sec. 1</i>).....	\$2,520.00																																																							
(3) One executive assistant (<i>same acts</i>).....	2,250.00																																																							
(4) Two clerks, class 4 (<i>same acts</i>).....	3,600.00																																																							
(5) Four clerks, class 3 (increase of 2 by transfer from lump fund) (<i>same acts</i>).....	6,400.00																																																							
(6) Seven clerks, class 2 (increase of 4 by transfer from lump fund) (<i>same acts</i>).....	9,800.00																																																							
(7) Two clerks, at \$1,320 each (by transfer from lump fund) (<i>same acts</i>).....	2,640.00																																																							

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
Salaries, [Office] Bureau of Farm Management and Farm Economics— Continued.		
(8) Eighteen clerks, class 1 (<i>R. S.</i> , p. 87, secs. 520–523; acts Mar. 4, 1915, vol. 38, p. 1087, sec. 1; May 31, 1920, vol. 41, p. 695, sec. 1).....	\$21,600.00	
(9) Three clerks, at \$1,100 each (<i>same acts</i>).....	3,300.00	
(10) Four clerks, at \$1,080 each (<i>same acts</i>).....	4,320.00	
(11) One clerk or draftsman (<i>same acts</i>).....	1,020.00	
(12) Fifteen clerks, at \$1,000 each (increase of 3 by transfer from lump fund) (<i>same acts</i>).....	15,000.00	
(13) One messenger or laborer (increase of \$180) (<i>same acts</i>).....	900.00	
NOTE.—This increase will provide a promotion for a laborer who has been in the Department eight years and has had no increase in salary since July 1, 1915. His services have been very satisfactory.		
(14) One messenger boy (<i>same acts</i>).....	660.00	
(15) Three messenger boys, at \$480 each (<i>same acts</i>).....	1,440.00	
(16) One charwoman (<i>same acts</i>).....	480.00	
(17) Five charwomen, at \$240 each (<i>same acts</i>).....	1,200.00	
(18) One library assistant (<i>same acts</i>).....	1,440.00	
(19) One library assistant (<i>same acts</i>).....	900.00	
(20) One photographer (increase of \$400) (<i>same acts</i>).....	1,800.00	
NOTE.—This change will provide a promotion for a photographer who has been in the service over 12 years and has had no promotion since July 1, 1913. He is one of the most capable photographers in the department. Photographers in the commercial world are much better paid.		
(21) One cartographer (<i>same acts</i>).....	1,500.00	
(22) One clerk or draftsman (<i>same acts</i>).....	1,440.00	
(23) One draftsman (<i>same acts</i>).....	1,200.00	
	\$92,910.00	\$75,390.00
Appropriation for 1916..... \$36,080	Estimate for 1917..... \$60,850	
Appropriation for 1917..... 69,810	Estimate for 1918..... 68,430	
Appropriation for 1918..... 68,430	Estimate for 1919..... 83,430	
Appropriation for 1919..... 83,430	Estimate for 1920..... 83,930	
Appropriation for 1920..... 81,430	Estimate for 1921..... 105,740	
Appropriation for 1921..... 75,390	Estimate for 1922..... 92,910	
NOTE.—Apparent increase, \$17,520; actual increase, \$3,080, as follows:		
<i>Promotions.</i>		
1 chief of bureau, from \$5,000 to \$7,500.....	\$2,500	
1 messenger or laborer, from \$720 to \$900.....	180	
1 photographer, from \$1,400 to \$1,800.....	400	
Actual increase.....	\$3,080	
<i>Transfers from lump fund for general expenses, which fund has been correspondingly reduced.</i>		
2 clerks, class 3.....	3,200	
4 clerks, class 2.....	5,600	
2 clerks, at \$1,320 each.....	2,640	
3 clerks, at \$1,000 each.....	3,000	
	14,440	
Apparent increase.....	17,520	

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.																								
<p><i>General Expenses, [Office] Bureau of Farm Management and Farm Economics—</i></p> <p>(24) For the employment of persons in the city of Washington and elsewhere, furniture, supplies, traveling expenses, rent outside of the District of Columbia, and all other expenses necessary in carrying out the work herein authorized, as follows (<i>acts Mar. 4, 1915, vol. 38, p. 1087, sec. 1; May 31, 1920, vol. 41, p. 695, sec. 1</i>):</p> <p>(25) [To investigate and encourage the adoption of improved methods of farm management and farm practice, \$300,000: <i>Provided</i>, That of this amount \$78,873 may be used in ascertaining the cost of production of the principal staple agricultural products.]</p> <p>(26) <i>To investigate the cost of production of farm products; to study economic problems connected with farm financial relations, farm labor, land utilization, ownership and tenancy, and rural life conditions; to compile and publish the Atlas of American Agriculture; and to encourage improved farm organization and farm management methods (submitted)</i></p> <table><tr><td>Appropriation for 1916.....</td><td>\$235, 000</td><td>Estimate for 1917.....</td><td>\$235, 000</td></tr><tr><td>Appropriation for 1917.....</td><td>225, 000</td><td>Estimate for 1918.....</td><td>267, 380</td></tr><tr><td>Appropriation for 1918.....</td><td>237, 380</td><td>Estimate for 1919.....</td><td>221, 660</td></tr><tr><td>Appropriation for 1919.....</td><td>221, 660</td><td>Estimate for 1920.....</td><td>218, 160</td></tr><tr><td>Appropriation for 1920.....</td><td>218, 160</td><td>Estimate for 1921.....</td><td>506, 250</td></tr><tr><td>Appropriation for 1921.....</td><td>300, 000</td><td>Estimate for 1922.....</td><td>612, 080</td></tr></table> <p>NOTE.—The old language is omitted and new language submitted therefor in order to indicate more accurately the various activities contemplated by the bureau under the plan of reorganization outlined last year by the special committee on farm management and as planned under the increased appropriation requested for the fiscal year 1922.</p> <p>There is an apparent increase in the item of \$312,080, but taking into consideration transfers to the statutory roll aggregating \$14,440, the actual increase is \$326,520. The specific reasons for these increases are given below:</p> <p>(a) \$7,400 for administrative expenses. This additional amount will be necessary in order to meet the materially higher cost of travel and to secure and retain the necessary personnel.</p> <p>(b) \$211,367 for cost of production studies. During the past year greatly increased interest has been manifested by the public generally in the cost of producing farm products. This work has been carried through the experimental stage and the department is now in a position to expand this work on a sound basis. This additional appropriation is essential to develop the work to the point where it will become more broadly useful. Cost studies are valuable not only because of the fundamental relation of cost to supply and price but also because cost figures constitute the basis for efficient farm management, which looks to the adjustment of the lines of production, the methods of production, and the choice of the agencies of production, with a view to satisfactory returns.</p> <p>(c) \$8,733 for farm-organization studies. This increase is merely sufficient to cover the increased cost of carrying on the work without further expansion. This work is proving of especial interest and value to farmers in the period of readjustment of farming to normal conditions.</p> <p>(d) \$13,870 for studies of farm finance and farm relations. The need for investigations of the financial problems of farmers is everywhere recognized. These problems are becoming more and more difficult with the growing complexity of our business and commercial life. If additional appropriations are provided for this work, studies will be made of methods employed and results obtained by farmers in various attempts to improve their credit through united and cooperative action. The investigation will also include studies of life insurance in relation to farm finance, covering the use of life insurance contracts as a means of improving the credit of the farmer and of relieving his dependents of the risk of their inheritance; studies of various methods of taxation as affecting the farmer, forms of live-stock insurance, accident-liability insurance for farming, etc.</p>	Appropriation for 1916.....	\$235, 000	Estimate for 1917.....	\$235, 000	Appropriation for 1917.....	225, 000	Estimate for 1918.....	267, 380	Appropriation for 1918.....	237, 380	Estimate for 1919.....	221, 660	Appropriation for 1919.....	221, 660	Estimate for 1920.....	218, 160	Appropriation for 1920.....	218, 160	Estimate for 1921.....	506, 250	Appropriation for 1921.....	300, 000	Estimate for 1922.....	612, 080	\$612, 080. 00	\$300, 000. 00
Appropriation for 1916.....	\$235, 000	Estimate for 1917.....	\$235, 000																							
Appropriation for 1917.....	225, 000	Estimate for 1918.....	267, 380																							
Appropriation for 1918.....	237, 380	Estimate for 1919.....	221, 660																							
Appropriation for 1919.....	221, 660	Estimate for 1920.....	218, 160																							
Appropriation for 1920.....	218, 160	Estimate for 1921.....	506, 250																							
Appropriation for 1921.....	300, 000	Estimate for 1922.....	612, 080																							

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
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General Expenses, [Office] Bureau of Farm Management and Farm Economics—Continued.

(e) \$20,000 for farm-labor studies. During the past year farmers have experienced great difficulty in securing sufficient farm labor. This is not, as commonly supposed, a problem due to the war alone but is, in fact, an ever-present problem and one which merits continuous study. Farmers are demanding that the question be given the attention which it deserves. For the present fiscal year it will be possible to allot only \$5,000 to these investigations. In order that the subject may receive adequate attention, at least \$20,000 additional should be made available for its prosecution.

(f) \$8,180 for agricultural history and geography investigations. This project is nationally recognized as of great importance. During the war the work upon it was especially noteworthy, and there is a constant demand for the data which the department has assembled. In order that the information collected by the 1920 census may be studied and adequately treated, increased funds will be necessary. Furthermore, the work on the "Atlas of American Agriculture" needs to be continued and increased in order that this valuable compilation may be placed at the disposal of the public. Studies of great natural regions, similar to the investigation of the northern Great Plains area, to determine in what way such areas may be best utilized to the advantage of the farmer, need to be made, and the historical work conducted under this project should be extended.

(g) \$37,050 for land-economics investigations. With the passing of the great public domain, the economic and social problems arising out of the farmer's relation to the land which he operates have become among the most important with which the Nation has to deal. One of these is the tenant problem. Studies also need to be made of the factors which influence land values, and special attention should be given to the subject of land settlement and colonization. Other problems affecting land utilization, ownership, and the consideration of land policies should receive more serious attention.

(h) \$12,600 for rural life studies. If the farm communities hope to compete with the industrial centers in maintaining a proper ratio between urban and rural populations, adequate studies must be made of the problem of maintaining and increasing the comforts of the farm home. It seems desirable and necessary that studies be made of the human aspects of tenancy and landlordism, migration from farm life, population groups, and country communities and villages, with the view of presenting the facts relative to these important problems. Studies of the farm woman's social problem should be continued and extended. The 1920 census will shortly make available a considerable amount of unpublished data relating to farm life. In order that proper advantage may be taken of this material, it is necessary that an increased appropriation be made for these investigations.

(i) \$7,320 for State cooperation. This project provides for carrying to the farmer in suitable form the information that has been gathered by careful investigation. There is a constant and increasing demand for the extension of this work. This need can not be met under the present limited funds.

Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.
Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>
Assistant chief.....per annum..	\$4,260.00	1	1	1
Economist.....do.....	4,500.00	3	3	3
Economist.....do.....	4,260.00	1	1	1
Economist.....do.....	4,000.00	1	1	1
Economist.....do.....	3,750.00	1	1	1
Economist.....do.....	3,600.00	5	4	4
Economist.....do.....	3,500.00	2	2	2
Economist.....do.....	3,250.00	2	2	3
Economist.....do.....	3,240.00	1	1	1
Economist.....do.....	3,000.00	10	2	6
Economist.....do.....	2,880.00	1	1	1
Economist.....do.....	2,760.00	4	2	3
Economist.....do.....	2,640.00	1	1	2
Economist.....do.....	2,520.00	10	5	7
Economist.....do.....	2,400.00	9	6	2
Economist.....do.....	2,340.00	1	1	1
Economist.....do.....	2,280.00	12	1	9
Economist.....do.....	2,220.00	2	1	1
Economist.....do.....	2,160.00	1	1	1
Economist.....do.....	2,120.00	1	1	1
Economist.....do.....	2,100.00	4	4	1
Economist.....do.....	2,040.00	3	2	6
Economist.....do.....	2,000.00	11	4	3
Economist.....do.....	1,980.00	4	3	1
Economist.....do.....	1,920.00	1	1	1
Economist.....do.....	1,860.00	4	1	6
Economist.....do.....	1,800.00	4	5	5

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.					Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, [Office] Bureau of Farm Management and Farm Economics—Continued.</i>						
Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.		
Salaries—Continued.		Number.	Number.	Number.		
Economist..... per annum.	\$1,760.00			2		
Economist.....do.....	1,740.00			1		
Economist.....do.....	1,680.00	1	1			
Economist.....do.....	1,620.00	4	2	3		
Economist.....do.....	1,560.00	1	1	2		
Economist.....do.....	1,440.00			1		
Assistant (temporary), \$1,500 to \$1,200.....do.....			11	9		
Agent.....do.....	2,280.00			1		
Agent.....do.....	2,240.00	1	1			
Agent.....do.....	2,100.00	1	1			
Agent.....do.....	2,040.00	1	1	1		
Agent.....do.....	2,000.00	1	1	2		
Agent.....do.....	1,950.00	1	1			
Agent.....do.....	1,890.00	1	1			
Agent.....do.....	1,800.00	3	5	7		
Agent.....do.....	1,700.00	1	1			
Agent.....do.....	1,650.00			1		
Agent.....do.....	1,600.00			2		
Agent.....do.....	1,530.00	2	1			
Agent.....do.....	1,500.00	3	3	5		
Agent.....do.....	1,350.00	1	1			
Agent.....do.....	1,200.00	1	3	7		
Agent.....do.....	1,000.00	1	1			
Agents (temporary), \$12.50 to \$3.50.....per diem.....			20	19		
Specialist.....per annum.....	1,800.00			1		
Draftsman.....do.....	1,800.00	1	1	1		
Draftsman.....do.....	1,320.00	2	2			
Draftsman.....do.....	1,100.00			2		
Clerk.....do.....	1,800.00	1	1			
Clerk.....do.....	1,600.00	3	4	3		
Clerk.....do.....	1,500.00	1	1			
Clerk.....do.....	1,400.00	1	4	1		
Clerk.....do.....	1,320.00		2			
Clerk (temporary), \$1,200 to \$1,000.....do.....		19	13	37		
Photographer.....do.....	1,200.00		1	1		
Clerks and collaborators, \$900 to \$1.....do.....		10	29	29		
Wages:						
Painter.....per diem.....	5.25			1		
Laborer.....do.....	3.00	1	1	1		
		162	168	201		
Salaries.....		\$319,080.00	\$228,777.00	\$159,394.24		
Wages.....		1,095.00	1,095.00	1,410.00		
OTHER OBJECTS OF EXPENDITURE.						
Stationery.....		13,005.00	6,599.00	1,779.58		
Traveling expenses.....		71,000.00	49,900.00	38,200.90		
Equipment and material.....		19,300.00	7,002.00	3,629.79		
Telephone and telegraph service.....		1,600.00	1,000.00	743.89		
Miscellaneous items.....		7,000.00	5,627.00	2,446.18		
Cooperative work with agricultural colleges and experiment stations.....						
Total.....		612,080.00	300,000.00	207,604.58		
Statement of clerks employed in District of Columbia under lump-fund appropriations for 30 days or more during the fiscal year ended June 30, 1920 (32 Stat., p. 303).						
GENERAL EXPENSES, BUREAU OF FARM MANAGEMENT AND FARM ECONOMICS.						
3 clerks, at \$1,600 each per annum.						
1 clerk, \$1,400 per annum.						
18 clerks, at \$1,200 each per annum.						
4 clerks, at \$1,100 each per annum.						
3 clerks, at \$1,080 each per annum.						
3 clerks, at \$1,000 each per annum.						
Total for [Office] Bureau of Farm Management and Farm Economics.....					\$704,990.00	\$375,390.00

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large, or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<p align="center">WEATHER BUREAU.</p> <p><i>Salaries, Weather Bureau—</i></p>		
<p>(1) One chief of bureau (increase of \$2,500) (<i>R. S., p. 87, secs. 520-523; acts Oct. 1, 1890, v.l. 26, p. 653, secs. 4, 5; May 31, 1920, v.l. 41, pp. 695, 696, sec. 1</i>) -----</p>	\$7, 500. 00	
<p>NOTE.—An increase of \$2,500 in the salary of the chief of bureau is recommended. See note under Item 1, page 19.</p>		
<p>(2) One assistant chief of bureau (increase of \$750) (<i>same acts</i>) -</p>	4, 000. 00	
<p>NOTE.—The increase recommended places the compensation of this officer on a par with that received by other department officials having like responsibilities. This officer has been in the department over 21 years, during which time he has acquired a knowledge and familiarity with the work that makes his services most effective and valuable. His salary has been unchanged since July 1, 1912.</p>		
<p>(3) One chief clerk (increase of \$500) (<i>same acts</i>) -----</p>	3, 000. 00	
<p>NOTE.—This change merely restores the salary of the position to what it was prior to July 1, 1914. The title of chief clerk does not adequately comprehend the duties of this position, which are much more extensive and responsible than those ordinarily performed by a chief clerk. He is one of the administrative officers of the bureau and is authorized by law to act as chief of bureau in the absence of the chief and assistant chief. The present incumbent has been in the service over 20 years.</p>		
<p>(4) One chief of division of stations and accounts (<i>same acts</i>) - - -</p>	2, 750. 00	
<p>(5) One chief of printing division (<i>same acts</i>) -----</p>	2, 500. 00	
<p>(6) Three chiefs of division, at \$2,500 each (increase of \$500 each) (<i>same acts</i>) - - - - -</p>	7, 500. 00	
<p>NOTE.—This change provides for the promotion of the chief of the supplies division, chief of the telegraph division, and the chief of the marine division. Their present salaries have remained unchanged for more than twenty years and are, in fact, less than the compensation received by many administrators and other assistants whose duties and responsibilities are by no means comparable. These officials have served in the department for periods from twenty-two to forty years.</p>		
<p>(7) Four executive clerks, at \$2,000 each (<i>submitted</i>) -----</p>	8, 000. 00	
<p>NOTE.—These places and 2 clerks class 3, 2 clerks class 2, 4 clerks class 1, 1 telephone operator \$900, and 1 addressograph operator \$1,000, are submitted in lieu of 10 clerks at \$1,000 each, and 5 clerks at \$900 each. This readjustment will result in a net salary increase of \$6,200 and a reduction of one in the total number of positions. The four places of executive clerks at \$2,000 will provide appropriate titles and proper salaries for employees who are performing responsible and exacting administrative duties. At present it is difficult to secure persons with even mediocre qualifications at \$1,000 and \$900 per annum. The losses that the Weather Bureau has sustained in the older and experienced clerks in the higher grades because of the limited opportunities for promotion on the statutory roll and their ability to command higher salaries elsewhere have brought the clerical personnel of the bureau to a condition that is serious. To relieve this situation to some extent, two additional places at \$1,600 and two at \$1,400 are recommended in order to make it possible to promote deserving employees in the lower grades.</p>		
<p>(8) Eight clerks, class 4 (<i>R. S., p. 87, secs. 520-523; acts Oct. 1, 1890, v.l. 26, p. 653, secs. 4, 5; May 31, 1920, v.l. 41, pp. 695, 696, sec. 1</i>) -----</p>	14, 400. 00	
<p>(9) Thirteen clerks, class 3 (increase of 2) (<i>same acts</i>) -----</p>	20, 800. 00	
<p>NOTE.—See note under Item 7.</p>		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large, or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>Salaries, Weather Bureau—Continued.</i>		
(10) Twenty-five clerks, class 2 (increase of 2) (<i>R. S., p. 87, secs. 520-523; acts Oct. 1, 1890, vol. 26, p. 653, secs. 4, 5; May 31, 1920, vol. 41, pp. 695, 696, sec. 1</i>) -----	\$35,000. 00	
NOTE.—See note under Item 7.		
(11) Fifty clerks, class 1 (increase of 4) (<i>same acts</i>) -----	60,000. 00	
NOTE.—See note under Item 7.		
(12) 【Ten clerks, at \$1,000 each.】		
NOTE.—See note under Item 7.		
(13) 【Five clerks, at \$900 each.】		
NOTE.—See note under Item 7.		
(14) One telephone operator (<i>submitted</i>) -----	900. 00	
NOTE.—See note under Item 7.		
(15) One addressograph operator (<i>submitted</i>) -----	1,000. 00	
NOTE.—See note under Item 7.		
(16) 【One foreman of printing, \$1,600.】		
NOTE.—See note under Item 17.		
(17) One supervising pressman (<i>submitted</i>) -----	1,800. 00	
NOTE.—This new place, and 1 supervising lithographer \$1,800, and 1 supervising compositor \$1,800, are submitted in lieu of 1 foreman of printing \$1,600, 1 lithographer \$1,500, and 1 printer or compositor \$1,440.		
These three employees are in charge of their respective sections of the Weather Bureau printing work, with headquarters in Washington, and have had many years of service. Even with the increases recommended their compensation will be much less than that now being paid in the Government Printing Office for similar work.		
(18) 【One lithographer, \$1,500.】		
NOTE.—See note under Item 17.		
(19) One supervising lithographer (<i>submitted</i>) -----	1,800. 00	
NOTE.—See note under Item 17.		
(20) Three lithographers, at \$1,600 each (increase of \$400 each) (<i>R. S., p. 87, secs. 520-523; acts Oct. 1, 1890, vol. 26, p. 653, secs. 4, 5; May 31, 1920, vol. 41, pp. 695, 696, sec. 1</i>) -	4,800. 00	
NOTE.—These increases, the promotion of 1 pressman from \$1,200 to \$1,600, and the addition of 5 printers or compositors at \$1,600 each, in lieu of 5 printers or compositors at \$1,350 each, are recommended in order to provide salaries more nearly commensurate with those paid for similar work outside the department. All these employees are on duty in the Weather Bureau printing office in Washington. Their present compensation is much lower than the prevailing commercial scale and the rates obtaining in the Government Printing Office.		
(21) One pressman (increase of \$400) (<i>same acts</i>) -----	1,600. 00	
NOTE.—See note under Item 20.		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large, or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>Salaries, Weather Bureau—Continued.</i>		
(22) 【One printer or compositor, \$1,440.】		
NOTE.—See note under Item 17.		
(23) One supervising compositor (<i>submitted</i>)	\$1, 800. 00	
NOTE.—See note under Item 17.		
(24) 【Five printers or compositors, at \$1,350 each.】		
NOTE.—See note under Item 20.		
(25) Seven printers or compositors, at \$1,600 each (2 by transfer from lump fund, 1 at \$1,440 with increase of \$160, and 1 at \$1,350 with increase of \$250, and 5 new places) (<i>R. S., p. 87, secs. 520–523; acts Oct. 1, 1890, v.l. 26, p. 653, secs. 4, 5; May 31, 1920, v.l. 41, pp. 695, 696, sec. 1</i>)	11, 200. 00	
NOTE.—For explanation of the addition of five new places see note under Item 20. Provision is also made for the transfer from the lump fund of 1 printer or compositor at \$1,440 and 1 at \$1,350 and their promotion to \$1,600 each. The reasons given in the note under Item 20 apply with equal force to these two cases.		
(26) Twenty printers or compositors, at \$1,500 each (increase of \$200 each) (<i>same acts</i>)	30, 000. 00	
NOTE.—These promotions and the addition of 7 printers or compositors, at \$1,300 each, are recommended in lieu of 1 printer or compositor \$1,200, and 6 at \$1,080 each, all of whom are field employees. This will make \$1,300 the minimum wage for printers in the field service, which is the very lowest amount, plus the bonus, at which competent men can be obtained. A number of vacancies have occurred in the printer grades at present salaries which it has been impossible to fill with journeymen printers. As an alternative, the Weather Bureau has had to appoint to these positions young men who have acquired a limited knowledge of the printing trade but who are incapable of performing first-class work. The salaries recommended will not in a single case equal the commercial rates paid printers even in small communities.		
(27) Seven printers or compositors, at \$1,300 each (<i>submitted</i>)	9, 100. 00	
NOTE.—See note under Item 26.		
(28) 【One printer or compositor, \$1,200.】		
NOTE.—See note under Item 26.		
(29) 【Six printers or compositors, at \$1,080 each.】		
NOTE.—See note under item 26.		
(30) 【Four folders and feeders, at \$720 each.】		
NOTE.—See note under item 31.		
(31) Four press feeders, at \$1,000 each (<i>submitted</i>)	4, 000. 00	
NOTE.—These new places are submitted in lieu of 4 folders and feeders, at \$720 each. The same argument regarding salaries paid to printers and pressmen applies to these press feeders. A salary of \$720 is too low to secure and retain competent help of the class required. These employees should receive salaries more nearly comparable with those paid in the Government Printing Office.		
The change in title is recommended in order to indicate more accurately the character of the work performed. No folding work is now done in the printing office of the Weather Bureau, the 4 employees designated as “folders and feeders” being engaged in press feeding.		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large, or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>Salaries, Weather Bureau—Continued.</i>		
(32) One supervising instrument maker (increase of \$180) (<i>R. S., p. 87, secs. 520-523; acts Oct. 1, 1890, vol. 26, p. 653, secs. 4, 5; May 31, 1920, vol. 41, pp. 695, 696, sec. 1</i>) -----	\$1, 800. 00	
NOTE.—This increase and the substitution of 4 instrument makers, at \$1,600 each (item 33), in lieu of 3 instruments makers, at \$1,300 each, and 1 at \$1,260 (items 35 and 36), will provide increases for employees who are expert in the repair and construction of delicate meteorological instruments. The same sort of work in other departments commands much better salaries than the Weather Bureau is able to pay. The work requires the highest type of mechanical skill, and competent and capable workmen can not be obtained and held at the low salaries now provided. In fact there has been a vacancy in the \$1,260 grade for nearly a year for which the Civil Service Commission has not been able to provide an eligible.		
(33) Four instrument makers, at \$1,600 each (<i>submitted</i>) -----	6, 400. 00	
NOTE.—See note under item 32.		
(34) One instrument maker (<i>R. S., p. 87, secs. 520-523; acts Oct. 1, 1890, vol. 26, p. 653, secs. 4, 5; May 31, 1920, vol. 41, pp. 695, 696, sec. 1</i>) -----	1, 440. 00	
(35) 【Three instrument makers, at \$1,300 each.】		
NOTE.—See note under item 32.		
(36) 【One instrument maker, \$1,260.】		
NOTE.—See note under item 32.		
(37) 【One skilled mechanic, \$1,300.】		
NOTE.—See note under item 38.		
(38) One supervising mechanic (<i>submitted</i>) -----	1, 800. 00	
NOTE.—This new place is submitted in lieu of 1 skilled mechanic at \$1,300, in order to provide for the promotion of an unusually skillful carpenter, with a wide range of experience in general building and the work performed by other mechanics. This employee has been with the Weather Bureau 23 years. He now has charge of the bureau's carpenter shop and it is proposed to give him supervision of the mechanical force and mechanical work of the bureau.		
In keeping with his increased responsibilities, a change in designation from "skilled mechanic" to "supervising mechanic" is recommended.		
(39) Three skilled mechanics, at \$1,400 each (<i>submitted</i>) -----	4, 200. 00	
NOTE.—These new places are submitted in lieu of 3 skilled mechanics, at \$1,000 each, with increase of \$400 each, in order to make possible the promotion of 3 mechanics from \$1,200 to \$1,400, and 3 from \$1,000 to \$1,200. The men affected are carpenters, painters, a kite maker, and a paper-cutting machine operator. The salaries recommended are in every case considerably less than those paid in the trades for similar work.		
(40) Four skilled mechanics, at \$1,200 each (increase of 1 by transfer from lump fund with increase of \$200) (<i>R. S., p. 87, secs. 520-523; acts Oct. 1, 1890, vol. 26, p. 653, secs. 4, 5; May 31, 1920, vol. 41, pp. 695, 696, sec. 1</i>) -----	4, 800. 00	
NOTE.—The employee transferred from the lump fund at \$1,000 with increase to \$1,200, is engaged upon the same general character of work as that performed by the other three skilled mechanics who receive \$1,200. This change is recommended in order to equalize their pay.		
(41) Nine skilled mechanics, at \$1,000 each (decrease of 3) (<i>same acts</i>) -----	9, 000. 00	
NOTE.—See note under item 39.		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large, or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>Salaries, Weather Bureau—Continued.</i>		
(42) One engineer (increase of \$500) (<i>R. S., p. 87, secs. 520-523; acts Oct. 1, 1890, vol. 26, p. 653, secs. 4, 5; May 31, 1920, vol. 41, pp. 695, 696, sec. 1</i>)-----	\$1, 800. 00	
NOTE.—This employee is in charge of the Weather Bureau heating, lighting, and power plant, and is, in fact, a chief engineer capable of handling plants of any size. For work of the character he performs, the present salary is too low. Even the amount recommended is less than the rate paid to other engineers having charge of Government heating, lighting, and power plants.		
(43) [Two firemen, at \$840 each.]		
NOTE.—See note under item 44.		
(44) Four firemen, at \$1,080 each (1 by transfer from lump fund with increase of \$240, and 3 new places) (<i>same acts</i>)-----	4, 320. 00	
NOTE.—This provides for the promotion of 2 firemen, at \$840 each to \$1,080 each, 1 new place, and an increase of \$240 in the salary of 1 fireman transferred from the lump fund roll at \$840. The present salary paid for work of this character is too low to secure and retain competent help, in view of the cost of living in Washington and the opportunity for better pay in outside employment. It is impossible to operate the Weather Bureau heating, lighting, and power plant with two firemen. Only one is on duty at a time, but for six months of the year it is necessary to operate 3 shifts of 8 hours each and for the remainder of the year 2 shifts of 8 hours each. A fireman must be on duty about the plant at all times.		
(45) [One captain of the watch, \$1,000.]		
NOTE.—See note under item 46.		
(46) One chief messenger (<i>submitted</i>)-----	1, 200. 00	
NOTE.—This position is submitted in lieu of captain of the watch, at \$1,000. In addition to the supervision of the watch force, this employee has charge of the messengers of the bureau engaged in the delivery of forecast cards, maps, bulletins, etc. He is very capable and efficient and is fully entitled to the increase recommended.		
(47) One electrician (<i>R. S., p. 87, secs. 520-523; acts Oct. 1, 1890, vol. 26, p. 653, secs. 4, 5; May 31, 1920, vol. 41, pp. 695, 696, sec. 1</i>)	1, 200. 00	
(48) Three repairmen, at \$1,200 each (increase of 2) (<i>same acts</i>)--	3, 600. 00	
NOTE.—The 2 new places and 34 messengers or laborers, at \$900 each, 22 messengers or laborers, at \$840 each, 11 messenger boys, at \$720 each, 99 messengers boys, at \$600 each, and 1 messenger boy transferred from lump fund at \$480 with increase of \$120, are submitted in lieu of 2 repairmen, at \$1,000 each, 28 messengers or laborers, at \$720 each, 6 messengers or laborers, at \$660 each, 22 messengers or laborers, at \$600 each, 11 messenger boys, at \$600 each, and 99 messenger boys, at \$480 each. This readjustment will provide for promotions in the force of telegraph line repairmen, messengers or laborers, and messenger boys. The present salaries are entirely inadequate to secure and retain competent help in the grades affected. Other departments and private employers are offering higher pay.		
(49) Six repairmen, at \$1,000 each (decrease of 2) (<i>same acts</i>)----	6, 000. 00	
NOTE.—See note under item 48.		
(50) One gardener (increase of \$200) (<i>same acts</i>)-----	1, 200. 00	
NOTE.—This change provides for the promotion of an unusually skillful and efficient workman. He is required to care for the lawns, flower beds, shrubbery, and trees on the grounds of the Weather Bureau in Washington. He has been connected with the bureau for 13 years, and his present salary is not commensurate with the duties he performs.		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large, or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.	
<i>Salaries, Weather Bureau—Continued.</i>			
(51) 【Four watchmen, at \$720 each, transferred to statutory roll, Secretary's Office.】			
NOTE.—The above places are transferred to the office of the Secretary, where it is proposed to centralize the entire watch force of the department, in the interest of efficiency and economy. See note under Item 52, page —.			
(52) 【Twenty-eight messengers or laborers, at \$720 each.】			
NOTE.—See note under item 48.			
(53) Thirty-four messengers or laborers, at \$900 each (<i>submitted</i>) ..	\$30,600. 00		
NOTE.—See note under item 48.			
(54) 【Six messengers or laborers, at \$660 each.】			
NOTE.—See note under item 48.			
(55) Twenty-two messengers or laborers, at \$840 each (<i>submitted</i>) ..	18,480. 00		
NOTE.—See note under Item 48.			
(56) Eleven messenger boys, at \$720 each (<i>submitted</i>)	7,920. 00		
NOTE.—See note under item 48.			
(57) One hundred messenger boys, at \$600 each (1 by transfer from lump fund with increase of \$120, and 99 new places) (<i>R. S., p. 87, secs. 520–523; acts Oct. 1, 1890, vol. 26, p. 653, secs. 4, 5; May 31, 1920, vol. 41, pp. 695, 696, sec. 1</i>)	60,000. 00		
NOTE.—See note under item 48.			
(58) 【Twenty-two messengers or laborers, at \$600 each.】			
NOTE.—See note under item 48.			
(59) 【Eleven messenger boys, at \$600 each.】			
NOTE.—See note under item 48.			
(60) 【Ninety-nine messenger boys, at \$480 each.】			
NOTE.—See note under item 48.			
(61) One charwoman (<i>same acts</i>)	360. 00		
(62) Three charwomen, at \$240 each (<i>same acts</i>)	720. 00		
	\$400,290. 00	\$344,450. 00	
Appropriation for 1912.....	\$313,170	Estimate for 1913.....	\$317,120
Appropriation for 1913.....	315,930	Estimate for 1914.....	330,240
Appropriation for 1914.....	325,860	Estimate for 1915.....	328,270
Appropriation for 1915.....	327,270	Estimate for 1916.....	324,640
Appropriation for 1916.....	332,900	Estimate for 1917.....	341,210
Appropriation for 1917.....	336,060	Estimate for 1918.....	342,230
Appropriation for 1918.....	327,900	Estimate for 1919.....	328,950
Appropriation for 1919.....	328,950	Estimate for 1920.....	343,610
Appropriation for 1920.....	342,890	Estimate for 1921.....	349,310
Appropriation for 1921.....	344,450	Estimate for 1922.....	400,290
NOTE.—Apparent increase, \$55,840; actual increase, \$50,730, as follows:			

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large, or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>Salaries, Weather Bureau—Continued.</i>		
<i>Promotions.</i>		
1 chief of bureau, from \$5,000 to \$7,500.....	\$2,500	
1 assistant chief of bureau, from \$3,250 to \$4,000.....	750	
1 chief clerk, from \$2,500 to \$3,000.....	500	
3 chiefs of division, from \$2,000 to \$2,500 each..	1,500	
3 lithographers, from \$1,200 to \$1,600 each....	1,200	
1 pressman, from \$1,200 to \$1,600.....	400	
1 printer or compositor, from \$1,440 to \$1,600..	160	
1 printer or compositor, from \$1,350 to \$1,600..	250	
20 printers or compositors, from \$1,300 to \$1,500 each.....	4,000	
1 supervising instrument maker, from \$1,620 to \$1,800.....	180	
1 skilled mechanic, from \$1,000 to \$1,200....	200	
1 engineer, from \$1,300 to \$1,800.....	500	
1 fireman, from \$840 to \$1,080.....	240	
1 gardener, from \$1,000 to \$1,200.....	200	
1 messenger boy, from \$480 to \$600.....	120	
	\$12,700	
<i>New places.</i>		
4 executive clerks, at \$2,000 each.....	\$8,000	
2 clerks, class 3.....	3,200	
2 clerks, class 2.....	2,800	
4 clerks, class 1.....	4,800	
1 telephone operator.....	900	
1 addressograph operator.....	1,000	
1 supervising pressman.....	1,800	
1 supervising lithographer.....	1,800	
1 supervising compositor.....	1,800	
5 printers or compositors, at \$1,600 each....	8,000	
7 printers or compositors, at \$1,300 each.....	9,100	
4 press feeders, at \$1,000 each.....	4,000	
4 instrument makers, at \$1,600 each.....	6,400	
1 supervising mechanic.....	1,800	
3 skilled mechanics, at \$1,400 each.....	4,200	
3 firemen, at \$1,080 each.....	3,240	
1 chief messenger.....	1,200	
2 repairmen, at \$1,200 each.....	2,400	
34 messengers or laborers, at \$900 each.....	30,600	
22 messengers or laborers, at \$840 each.....	18,480	
11 messenger boys, at \$720 each.....	7,920	
99 messenger boys, at \$600 each.....	59,400	
	182,840	
	\$195,540	
<i>Places dropped.</i>		
10 clerks, at \$1,000 each.....	\$10,000	
5 clerks, at \$900 each.....	4,500	
1 foreman of printing.....	1,600	
1 lithographer.....	1,500	
1 printer or compositor.....	1,440	
5 printers or compositors, at \$1,350 each.....	6,750	
1 printer or compositor.....	1,200	
6 printers or compositors, at \$1,080 each.....	6,480	
4 folders and feeders, at \$720 each.....	2,880	
3 instrument makers, at \$1,300 each.....	3,900	
1 instrument maker.....	1,260	
1 skilled mechanic.....	1,300	
3 skilled mechanics, at \$1,000 each.....	3,000	
2 firemen, at \$840 each.....	1,680	
1 captain of the watch.....	1,000	
2 repairmen, at \$1,000 each.....	2,000	
28 messengers or laborers, at \$720 each.....	20,160	
6 messengers or laborers, at \$660 each.....	3,960	
22 messengers or laborers, at \$600 each.....	13,200	
11 messenger boys, at \$600 each.....	6,600	
99 messenger boys, at \$480 each.....	47,520	
	141,930	
<i>Transfers to statutory roll of the Secretary's office.</i>		
4 watchmen, at \$720 each.....	2,880	
	144,810	
Actual increase.....	50,730	

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large, or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>Salaries, Weather Bureau—Continued.</i>		
<i>Transfers from lump funds, which funds have been correspondingly reduced.</i>		
1 printer or compositor..... \$1,440 1 printer or compositor..... 1,350 1 skilled mechanic..... 1,000 1 fireman..... 840 1 messenger boy..... 480		
	\$5,110	
Apparent increase.....		55,840
<i>General Expenses, Weather Bureau—</i>		
(63) For carrying into effect in the District of Columbia and elsewhere in the United States, in the West Indies, in the Panama Canal, the Caribbean Sea, and on adjacent coasts, in the Hawaiian Islands, in Bermuda, and in Alaska, the provisions of an act approved Oct. 1, 1890, so far as they relate to the weather service transferred thereby to the Department of Agriculture, for the employment of professors of meteorology, district forecasters, local forecasters, meteorologists, section directors, observers, apprentices, operators, skilled mechanics, instrument makers, foremen, assistant foremen, proof readers, compositors, pressmen, lithographers, folders and feeders, repairmen, station agents, messengers, messenger boys, laborers, special observers, displaymen, and other necessary employees; for fuel, gas, electricity, freight and express charges, furniture, stationery, ice, dry goods, twine, mats, oil, paints, glass, lumber, hardware, and washing towels; for advertising; for purchase, subsistence, and care of horses and vehicles, the purchase and repair of harness, for official purposes only; for instruments, shelters, apparatus, storm-warning towers and repairs thereto; for rent of offices; for repairs and improvements to existing buildings and care and preservation of grounds, including the construction of necessary outbuildings and sidewalks on public streets abutting Weather Bureau grounds; and the erection of temporary buildings for living quarters of observers; for official traveling expenses; for telephone rentals, and for telegraphing, telephoning, and cabling reports and messages, rates to be fixed by the Secretary of Agriculture by agreements with the companies performing the service; for the maintenance and repair of Weather Bureau telegraph, telephone, and cable lines; and for every other expenditure required for the establishment, equipment, and maintenance of meteorological offices and stations and for the issuing of weather forecasts and warnings of storms, cold waves, frosts, and heavy snows, the gauging and measuring of the flow of rivers and the issuing of river forecasts and warnings; for observations and reports relating to crops and for other necessary observations and reports, including cooperation with other bureaus of the Government and societies and institutions of learning for the dissemination of meteorological information, as follows (<i>acts Oct. 1, 1890, vol. 26, p. 653, secs. 4, 5; May 31, 1920, vol. 41, pp. 696, 697, sec. 1</i>):		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large, or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.		
<i>General Expenses, Weather Bureau—Continued.</i>				
(64) For necessary expenses in the city of Washington incident to collecting and disseminating meteorological, climatological, and marine information, and for investigations in meteorology, climatology, seismology, volcanology, evaporation, and aerology [\$109,250] (<i>acts Oct. 1, 1890, vol. 26, p. 653, secs. 4, 5; May 31, 1920, vol. 41, pp. 696, 697, sec. 1</i>)				
Appropriation for 1912. \$106,000	Estimate for 1913. \$104,000			
Appropriation for 1913. 105,500	Estimate for 1914. 105,500			
Appropriation for 1914. 105,500	Estimate for 1915. 110,000			
Appropriation for 1915. 110,000	Estimate for 1916. 110,000			
Appropriation for 1916. 110,000	Estimate for 1917. 109,250			
Appropriation for 1917. 109,250	Estimate for 1918. 109,250			
Appropriation for 1918. 109,250	Estimate for 1919. 109,250			
Appropriation for 1919. 109,250	Estimate for 1920. 109,250			
Appropriation for 1920. 109,250	Estimate for 1921. 116,190			
Appropriation for 1921. 109,250	Estimate for 1922. 126,910			
NOTE.—There is an apparent increase in this item of \$17,660, but taking into consideration the transfer to the statutory roll of a fireman at \$840, the actual increase is \$18,500. It is proposed to use this amount as follows:				
(a) \$5,500 for salaries, telegraphing, and miscellaneous expenses incidental to the proposed extension of the vessel weather service.				
(b) \$6,000 for improving the forecast and warning service of the bureau in connection with the preparation of charts, the compilation of reports, etc. During and since the war period this work has been performed under severe handicaps because of the loss of many map men by resignation due to inadequacy of salaries. Only trained observers can properly perform these duties. The work is quite undesirable to most men because it involves service twice daily, in the early morning and again at night, every day in the year, Sundays and holidays included. The making of forecast maps and charts is the basis of all the forecast and warning service of the bureau. Moreover, the special forecasts now being made for the aviators of the Army, Navy, and Post Office Department, and the largely increased demands for frost, cold-wave, and other warnings have materially increased the duties of the forecasters and map men and intensified the pressure under which they must work. It is the purpose to pay the map force salaries ranging from \$1,440 to \$2,000 per annum (the higher rate to those occupying supervisory positions) and to provide for two additional employees. The salaries now range from \$1,200 to \$1,800, the majority of them being in the lower grades.				
(c) \$6,000 for supplies, instruments, and telegraphic expenses. There has been no increase in the appropriation for expenses in Washington since the fiscal year 1915. The great advance in the cost of materials of all kinds has made it necessary to exercise the most rigid economy and to use the equipment in hand to the limit of serviceability. The point has now been reached when rehabilitation is necessary. About \$1,000 of the increase will be needed to meet the advance of rates for radio communications which have been announced effective July 1, 1921.				
(d) \$1,000 for telegraphing and miscellaneous expenses in connection with the proposed new harvest forecast service.				
Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.
Salaries:		Number.	Number.	Number.
Meteorologist.....per annum..	\$4,500.00	1		
Meteorologist.....do.....	3,960.00	3	3	3
Meteorologist.....do.....	3,500.00	2	2	2
Meteorologist.....do.....	3,250.00	1	1	1
Meteorologist.....do.....	3,240.00	3	1	
Meteorologist.....do.....	2,880.00			1
Meteorologist.....do.....	2,520.00	3	3	2
Meteorologist.....do.....	2,280.00		1	1
Meteorologist.....do.....	2,160.00			1
Meteorologist.....do.....	2,040.00	3	2	1
Meteorologist.....do.....	1,800.00	2	1	2
Meteorologist.....do.....	1,620.00	5	3	5
Observer.....do.....	1,440.00	2	1	1
Observer.....do.....	1,260.00	2	1	1
Clerk (temporary).....do.....	1,200.00		2	
Instrument maker.....do.....	1,620.00			1
Assistant observers, skilled mechanic, and watchmen, \$1,080 to \$720.....do.....			4	2
		27	25	24
Salaries.....		\$60,500.00	\$52,000.00	\$50,049.83
OTHER OBJECTS OF EXPENDITURE.				
Stationery.....		4,780.00	4,000.00	3,966.71
Equipment and material.....		5,950.00	4,750.00	4,267.61
Telephone and telegraph service.....		41,500.00	37,500.00	37,171.31
Miscellaneous items.....		14,180.00	11,000.00	13,543.61
Total.....		126,910.00	109,250.00	108,999.07

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large, or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.																																													
<i>General Expenses, Weather Bureau—Continued.</i>																																															
(65) For the maintenance of a printing office in the city of Washington for the printing of weather maps, bulletins, circulars, forms, and other publications, including the pay of additional employees, when necessary [\$12,800] , <i>\$14,450: Provided, That no printing shall be done by the Weather Bureau that, in the judgment of the Secretary of Agriculture, can be done at the Government Printing Office without impairing the service of said bureau (acts Oct. 1, 1890, vol. 26, p. 653, secs. 4, 5; May 31, 1920, vol. 41, pp. 696, 697, sec. 1)</i> -----	\$14, 450. 00																																														
Appropriation for 1912..... \$40,000	Estimate for 1913..... \$16,750																																														
Appropriation for 1913..... 18,000	Estimate for 1914..... 16,750																																														
Appropriation for 1914..... 16,750	Estimate for 1915..... 25,000																																														
Appropriation for 1915..... 26,000	Estimate for 1916..... 14,000																																														
Appropriation for 1916..... 14,000	Estimate for 1917..... 14,000																																														
Appropriation for 1917..... 12,800	Estimate for 1918..... 12,800																																														
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Appropriation for 1920..... 12,800	Estimate for 1921..... 15,000																																														
Appropriation for 1921..... 12,800	Estimate for 1922..... 14,450																																														
NOTE.—There is an apparent increase in this item of \$1,650, but taking into consideration the transfer to the statutory roll of a printer or compositor at \$1,350, the actual increase is \$3,000.																																															
This sum is needed to meet the greatly increased cost of printing equipment, repairs thereto, and supplies used in the Weather Bureau printing office in Washington. There has been no increase in this fund since 1915.																																															
<table><tr><th>Employees.</th><th>Rate.</th><th>Estimated, 1922.</th><th>Appropriated, 1921.</th><th>Expended, 1920.</th></tr><tr><td>Salaries:</td><td></td><td>Number.</td><td>Number.</td><td>Number.</td></tr><tr><td>Compositor, temporary..... per annum.....</td><td>\$1,350.00</td><td>.....</td><td>1</td><td>1</td></tr><tr><td>Salaries.....</td><td></td><td></td><td>\$675.00</td><td>\$236.25</td></tr><tr><td colspan="5">OTHER OBJECTS OF EXPENDITURES.</td></tr><tr><td>Stationery.....</td><td></td><td>\$3,500.00</td><td>3,000.00</td><td>2,895.13</td></tr><tr><td>Equipment and material.....</td><td></td><td>8,950.00</td><td>8,000.00</td><td>8,089.81</td></tr><tr><td>Miscellaneous items.....</td><td></td><td>2,000.00</td><td>1,125.00</td><td>1,564.56</td></tr><tr><td>Total.....</td><td></td><td>14,450.00</td><td>12,800.00</td><td>12,785.75</td></tr></table>			Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.	Salaries:		Number.	Number.	Number.	Compositor, temporary..... per annum.....	\$1,350.00	1	1	Salaries.....			\$675.00	\$236.25	OTHER OBJECTS OF EXPENDITURES.					Stationery.....		\$3,500.00	3,000.00	2,895.13	Equipment and material.....		8,950.00	8,000.00	8,089.81	Miscellaneous items.....		2,000.00	1,125.00	1,564.56	Total.....		14,450.00	12,800.00	12,785.75
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Miscellaneous items.....		2,000.00	1,125.00	1,564.56																																											
Total.....		14,450.00	12,800.00	12,785.75																																											
(66) For necessary expenses outside of the city of Washington incident to collecting and disseminating meteorological, climatological, and marine information, and for investigations in meteorology, climatology, seismology, volcanology, evaporation, and aerology, [\$1,303,030] <i>\$1,398,610, [including not to exceed \$700,000 for salaries, \$129,040 for special observations and reports, and \$295,750 for telegraphing and telephoning]</i> (same acts)-----	1,398,610.00																																														
Appropriation for 1912..... \$546,580	Estimate for 1913..... \$555,000																																														
Appropriation for 1913..... 569,000	Estimate for 1914..... 585,000																																														
Appropriation for 1914..... 1,189,000	Estimate for 1915..... 1,189,000																																														
Appropriation for 1915..... 1,189,000	Estimate for 1916..... 1,231,110																																														
Appropriation for 1916..... 1,185,150	Estimate for 1917..... 1,267,150																																														
Appropriation for 1917..... 1,242,650	Estimate for 1918..... 1,342,750																																														
Appropriation for 1918..... 1,301,190	Estimate for 1919..... 1,302,690																																														
Appropriation for 1919..... 1,312,190	Estimate for 1920..... 1,330,150																																														
Appropriation for 1920..... 1,304,230	Estimate for 1921..... 1,373,430																																														
Appropriation for 1921..... 1,303,030	Estimate for 1922..... 1,398,610																																														
NOTE.—There is an apparent increase in the above item of \$95,580, but taking into consideration the transfer to the statutory roll of 1 printer or compositor at \$1,440, 1 skilled mechanic at \$1,000, and 1 messenger boy at \$480, aggregating \$2,920, the actual increase is \$98,500.																																															
The language in brackets has been omitted as it serves no useful purpose, handicaps administrative action, and restricts latitude in the use of the appropriations to the best advantage in meeting all contingencies that arise in a service whose activities are so varied and widespread as those of the Weather Bureau.																																															
It is proposed to expend this additional amount as follows:																																															
(a) \$9,500 for extension of vessel weather service. It is essential to secure more wireless reports from vessels at sea as an aid to the forecasters in giving more accurate warnings in the interest of shipping and of sudden and extreme weather changes, as well as to materially increase the effectiveness of the forest-fire forecast work.																																															

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large, or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Weather Bureau—Continued.</i>		
<p>(b) \$20,000 for the resumption of weather maps. It is desired to employ additional men at a number of stations in order that the publication of weather maps and the preparation of glass maps on a number of important exchanges in large cities may be resumed. This is one of the most effective methods of disseminating weather information. The present personnel at many of the stations, however, is inadequate to undertake the work of issuing maps.</p>		
<p>(c) \$9,000 for the extension of the fruit frost service. As the value of the fruit crop has increased, its protection from frost by heating has become more extensively practiced, and the demands on the Weather Bureau for frost forecasts and specialized advice exceed its ability to meet them under present appropriations.</p>		
<p>(d) \$7,000 for special forecasts in connection with orchard spraying operations. It has been demonstrated that sprays must be applied to fruit trees just before a rainy spell in order to produce the best results, but the regular 36 and 48 hour forecasts made by the Weather Bureau do not give warnings of rainy spells far enough in advance to determine the proper time to spray, as it requires from 48 to 72 hours to apply the spray in many of the large orchards. In order to overcome this difficulty, expert meteorologists must be located in orchard areas where they can confer with and advise the spraying specialists. The fruit growers and specialists of New York, Michigan, Washington, and Oregon have repeatedly urged the extension of this special service.</p>		
<p>(e) \$4,000 for extension of cattle, corn, and wheat region service. A daily corn and wheat region service now covers the 16 principal grain States from Ohio and Kentucky as far westward as Montana. It is proposed to extend this service into other important districts, especially Wyoming, Virginia, Pennsylvania, Maryland, New York, and Tennessee, where large quantities of corn and wheat are grown, and to include the distribution of warnings of heavy snows and cold waves for the protection of cattle in such of the western States as do not now have this service.</p>		
<p>(f) \$2,000 for harvest forecasts. This is a new item, for which only a small amount is required to insure a better distribution of special forecasts during the harvesting of wheat, oats, hay, and other crops that are liable to damage if unfavorable weather occurs between the time of cutting and shocking. It is proposed to inaugurate an intensive distribution of harvest forecasts in one State to determine their entire practicability and value before entering into extensive operations in other States.</p>		
<p>(g) \$9,000 for extension of river and flood work. A part of this increase will provide for the appointment of an engineer to install river gauges, run lines of levels, establish bench marks, and inspect gauges which are often damaged or destroyed by floods. Funds are also required to give a wider distribution to river and rainfall data. No increase has been provided for this service for several years, and the demands for river records, flood warnings, etc., are constantly being received.</p>		
<p>(h) \$38,000 for rents, repairs to buildings, freight, supplies, instruments, etc. There has been no material increase for several years in the funds from which the miscellaneous expenses required for the Weather Bureau field service are defrayed. The increase in rent charges and the cost of supplies, equipment, instruments, repair work, etc., have been so great that only the barest necessities have been met and old equipment has been used to the limit of serviceability. It is now imperative that equipment and instruments be renewed and replenished, or else the effectiveness of the service will suffer to a serious extent. It is proposed to use this \$38,000 increase as follows:</p>		
<p>(1) \$15,000 to cover increased cost of supplies and equipment and for necessary additional supplies;</p>		
<p>(2) \$5,000 for increased rents;</p>		
<p>(3) \$8,000 for necessary repairs to buildings;</p>		
<p>(4) \$8,000 for instruments; and</p>		
<p>(5) \$2,000 for freight and express charges, due to increased rates.</p>		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large, or to Revised Statutes, and estimated amount required for each detailed object.					Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Weather Bureau—Continued.</i>						
Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.		
Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>		
Meteorologist.....per annum..	\$4,500.00	1				
Meteorologist.....do.....	3,960.00	1	1	1		
Meteorologist.....do.....	3,600.00	3	2			
Meteorologist.....do.....	3,240.00	5		3		
Meteorologist.....do.....	2,880.00	6	2	2		
Meteorologist.....do.....	2,520.00	22	18	8		
Meteorologist.....do.....	2,280.00	16	14	14		
Meteorologist.....do.....	2,160.00	27	24	17		
Meteorologist.....do.....	1,800.00	52	48	34		
Meteorologist.....do.....	1,620.00	68	64	64		
Meteorologist.....do.....	1,080.00	62	32	63		
Volcanologist.....do.....	3,960.00	1	1	1		
Meteorologist and observer.....do.....	1,440.00	93	89	90		
Meteorologist and observer.....do.....	1,260.00	97	96	105		
Local forecaster.....do.....	1,000.00		2	2		
Clerk, temporary.....do.....	1,000.00			1		
Printer.....do.....	1,440.00		1	1		
Printer, temporary.....do.....	1,200.00		1			
Observers, assistant observers, warning distributors, vessel reporters and apprentices—						
\$960 to \$480.....do.....		36	78	85		
\$40 to \$1.....per month.....		1,725	1,695	1,689		
Emergency assistant observers, printers, assistants, and messenger boys, \$6.50 to \$1.....per diem.....		110	100	92		
Wages:						
Repairman, temporary..per annum..	1,200.00		1	1		
Mechanic.....do.....	1,000.00		1	1		
Fireman and laborer, \$720 to \$480.....do.....			2	1		
		2,325	2,272	2,275		
Salaries.....		\$848,900.00	\$801,000.00	\$776,107.76		
Wages.....			3,000.00	2,400.00		
OTHER OBJECTS OF EXPENDITURE.						
Stationery.....		23,000.00	21,500.00	20,681.46		
Equipment and material.....		130,000.00	110,000.00	119,109.93		
Telephone and telegraph service.....		244,500.00	235,000.00	231,702.61		
Miscellaneous items.....		152,210.00	132,530.00	148,447.98		
Total.....		1,398,610.00	1,303,030.00	1,298,449.74		
(67) For official traveling expenses ["\$26,000"] (<i>acts Oct. 1, 1890, vol. 26, p. 653, secs. 4, 5; May 31, 1920, vol. 41, pp. 696, 697, sec. 1)</i>					\$33,500.00	
Appropriation for 1912.....	\$22,000	Estimate for 1913.....	\$22,000			
Appropriation for 1913.....	22,000	Estimate for 1914.....	24,500			
Appropriation for 1914.....	24,500	Estimate for 1915.....	24,500			
Appropriation for 1915.....	30,000	Estimate for 1916.....	24,000			
Appropriation for 1916.....	24,000	Estimate for 1917.....	24,000			
Appropriation for 1917.....	21,000	Estimate for 1918.....	25,500			
Appropriation for 1918.....	25,500	Estimate for 1919.....	25,500			
Appropriation for 1919.....	26,000	Estimate for 1920.....	26,000			
Appropriation for 1920.....	26,000	Estimate for 1921.....	28,200			
Appropriation for 1921.....	26,000	Estimate for 1922.....	33,500			
NOTE.—There is an increase in the above item of \$7,500, which it is proposed to use as follows:						
(a) \$4,500 to cover the higher expenses of travel, incident to recent increases of rates for railroad and sleeping-car fares, in connection with the regular forecasting work of the Weather Bureau.						
(b) \$1,000 for travel required in connection with fruit frost service.						
(c) \$1,000 for travel in connection with orchard-spraying service.						
(d) \$1,000 for travel incident to an extension of the river and flood work.						
Other objects of expenditure.		Estimated, 1922.	Appropriated, 1921.	Expended, 1920.		
Traveling expenses.....		\$33,500.00	\$26,000.00	\$25,266.68		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large, or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Weather Bureau—Continued.</i>		
(68) For the maintenance of stations, for observing, measuring, and investigating atmospheric phenomena, including salaries, travel, and other expenses in the city of Washington and elsewhere [\$81,020] (<i>acts Oct. 1, 1890, vol. 26, p. 653, secs. 4, 5; May 31, 1920, vol. 41, pp. 696, 697, sec. 1</i>)	\$281, 020. 00	
Appropriation for 1919..... \$98,740 Estimate for 1920..... \$85,000 Appropriation for 1920..... 83,040 Estimate for 1921..... 281,020 Appropriation for 1921..... 81,020 Estimate for 1922..... 281,020		
<p>NOTE.—There is an increase in the above item of \$200,000. The main object of this project is to take observations in the upper air, which will be used, in connection with observations taken at surface stations, for the purpose of adding to existing knowledge of the physics and dynamics of the air, and especially to furnish aviators with accurate information as to the weather conditions in the upper air and with forecasts which will aid them in flights or else to avoid flights under hazardous conditions. Forecasts are now being made for various flying zones, but the number of stations at which upper-air observations are being made are quite inadequate to sufficiently represent the territory to be covered. The Weather Bureau is the only Federal agency which collects and disseminates information of this character, which is indispensable to Army, Navy, post-office, and civilian flyers. Aerial navigation now creates a great demand which can be met only by increased appropriations and extension of the present service.</p> <p>The specific purposes to which the increase of \$200,000 will be applied, if granted, are:</p> <p>(a) \$20,000 for free air observations by means of kites. Work of this character is now being conducted at only six stations, located at points in the Middle West and South. Two additional kite stations are much needed, one in the northwestern and the other in the northeastern section of the country.</p> <p>(b) \$115,000 for pilot balloon stations. Observations by means of pilot balloons are now made at the six kite stations and also at six other points. The number of places where these observations are taken are, however, too few for effective work, especially as the flying areas increase. At least 40 additional stations are required. The principal expenditures are for theodolites, gas containers, gas, balloons, telegraphing, and for salaries.</p> <p>(c) \$10,000 for extension of upper-air stations in the West Indies in connection with hurricane warnings. Two upper-air stations are now being conducted on a limited scale at San Juan, P. R., and Key West, Fla., for the purpose of securing data regarding the speed of movement and characteristics of hurricanes, the most violent and destructive type of storms that visit the United States and its possessions. It is important that at least six additional pilot balloon observing points should be established in the regions of the Gulf of Mexico and the Caribbean Sea.</p> <p>(d) \$10,000 for development of methods of obtaining reliable meteorological records in airplanes. Airplanes offer an ideal opportunity for securing meteorological observations in the free air. The planes move rapidly and constantly shift elevations. Therefore, observations made in airplanes to be of value must be accurately identified with the exact location and height of the plane and the results coordinated. The increase requested will be expended principally for salaries, instruments, and apparatus.</p> <p>(e) \$25,000 for sounding balloon observations. For a comprehensive study and determination of upper-air conditions it is necessary that temperature, moisture, pressure, and other data regarding the higher levels of the atmosphere be obtained. It is proposed to conduct investigations with sounding balloons at a limited number of stations where kite observations are made. The amount requested will be expended for the purchase of balloons and instruments, as the work can be conducted with the personnel provided for by other projects under this item.</p> <p>(f) \$20,000 for the establishment of aerial forecast centers. At the present time all aerial forecasts for the benefit of aviators are made in Washington, D. C., but, in the interest of greater efficiency and more direct contact with aviators, centers should be established in zones where aviation activities are large. It is proposed to establish these stations in sections where aviation activities are the greatest, and at places where regular Weather Bureau stations are now in operation, so as to utilize as far as possible existing office space and facilities and conduct the work in the most economical manner. The principal expenditure will be for expert forecasters and assistants, telegraphing, and miscellaneous supplies.</p>		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large, or to Revised Statutes, and estimated amount required for each detailed object.					Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Weather Bureau—Continued.</i>						
Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.		
Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>		
Meteorologist.....per annum..	\$3,600.00	1				
Meteorologist.....do.....	3,240.00	1	1			
Meteorologist.....do.....	2,520.00	4	1			
Meteorologist.....do.....	2,160.00	1		1		
Meteorologist.....do.....	1,800.00	6	1			
Meteorologist.....do.....	1,620.00	8	4	4		
Observer.....do.....	1,440.00	37	7	4		
Observer.....do.....	1,260.00	36	11	13		
Observer.....do.....	1,080.00	22	2	8		
Assistant observers, meteorological observers, etc., \$900 to \$600.....do.....		6	14	7		
Clerk.....do.....	1,200.00			2		
Instrument maker.....do.....	1,620.00			1		
		122	41	40		
Salaries.....		\$162,000.00	\$52,000.00	\$49,484.00		
OTHER OBJECTS OF EXPENDITURE.						
Stationery.....		5,000.00	600.00	555.04		
Traveling expenses.....		11,400.00	1,400.00	1,313.90		
Equipment and material.....		65,000.00	10,350.00	15,300.26		
Telephone and telegraph service.....		17,000.00	1,500.00	660.30		
Miscellaneous items.....		20,620.00	15,170.00	17,449.08		
Total.....		281,020.00	81,020.00	84,762.58		

- (69) *For the maintenance of a highway weather service for the collection of reports concerning the effects of weather on public highways, and the issuing of advices, forecasts, and warnings in the aid of highway travel, in cooperation with Federal, State, and local agencies, including salaries, travel, and all other expenses in the city of Washington and elsewhere (submitted).....* **\$20,000.00**

NOTE.—This is a new item. The work was begun in the winter of 1917-18 as a war-time measure to aid the Government motor-truck freight transportation service by furnishing information regarding the conditions of the roads as affected by snowfall. The first project conducted was to keep open the Lincoln Highway from Pittsburgh eastward over the mountains. As knowledge of the service spread, numerous requests for its inauguration in other localities arose. The methods consist of collecting information by mail and telegraphing the conditions of the main highways as affected by weather and disseminating the data by publication in the newspapers and on the regular bulletins of the Weather Bureau. The service has received the approval of the Bureau of Public Roads and of representatives of the State highway departments, who, at a meeting held in Washington in the summer of 1919, passed a resolution approving the work and offering cooperation of the several State highway departments in collecting the required data. Since no specific appropriation has been made for the service, its activities necessarily have been limited to localities where it could be conducted with very little expense, but, in view of the demand therefor, as evidenced by the many requests made for its inauguration by State and county highway associations, automobile and motor-truck organizations, and others, a special appropriation will be needed to effectively and systematically organize the work.

Employees.	Rate.	Estimated, 1922.	Appropriated, 1921. ¹	Expended, 1920. ¹
Salaries:		<i>Number.</i>		
Meteorologist.....per annum..	\$1,800.00	1		
Meteorologist.....do.....	1,440.00	1		
Observer.....do.....	1,260.00	5		
Observer.....do.....	1,080.00	3		
Correspondents and reporters, 50 cents to 25 cents per observation (\$1,500).....do.....	30.00	50		
		60		
Salaries.....		\$14,500.00		
OTHER OBJECTS OF EXPENDITURE.				
Stationery.....		800.00		
Telephone and telegraph service.....		4,500.00		
Miscellaneous items.....		200.00		
Total.....		20,000.00		

¹ No appropriation for fiscal years 1920 and 1921.

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large, or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.																																																																											
<i>General Expenses, Weather Bureau—Continued.</i>																																																																													
(70) <i>For the establishment and maintenance of special stations in national forests and elsewhere, the collection of reports, and the issuing of forecasts and warnings in connection with the protection of forests from fires, in cooperation with the Forest Service, State, and other organizations, including salaries, travel, and other expenses in the city of Washington and elsewhere (submitted) -----</i>	\$15, 000. 00																																																																												
<p>NOTE.—This is a new item. The purpose of the proposed service is the making and dissemination by district forecasters of warnings of weather conditions favorable to the inception and spread of forest fires, and of the approach of rains which affect their control after fires have started. Present appropriations are insufficient to organize an efficient system of reporting stations and provide for the employment of competent officials to make comprehensive surveys and studies of the affected regions and the conditions justifying the issuance of warnings. Resolutions have been passed on numerous occasions by forestry and fire-fighting associations of the West recommending a special appropriation for this service. The extensive and destructive forest fires that have recently prevailed in the Northwestern States emphasize the need for this kind of service. It is estimated that one-half of the fires occur in logging camps, and the only way to prevent these fires is to cease operating fire-emitting engines during extremely hazardous weather. It is desired to establish a number of reporting stations throughout the regions concerned and to assign two or more leading forecasters to study all the information collected with a view to furnishing forecasters and fire fighters advance advice as to the approach of threatening conditions before fires occur, and information as to where and when rains may be expected when fires are in progress.</p>																																																																													
<table><tr><th>Employees.</th><th>Rate.</th><th>Estimated, 1922.</th><th>Appropriated, 1921.¹</th><th>Expended, 1920.¹</th></tr><tr><td>Salaries:</td><td></td><td>Number.</td><td></td><td></td></tr><tr><td>Meteorologist.....per annum..</td><td>\$2, 160.00</td><td>1</td><td></td><td></td></tr><tr><td>Observer.....do.....</td><td>1, 440.00</td><td>1</td><td></td><td></td></tr><tr><td>Observer.....do.....</td><td>1, 260.00</td><td>1</td><td></td><td></td></tr><tr><td>Special observers, \$1 to \$0.50 per observation (\$2,250).....do.....</td><td>50.00</td><td>45</td><td></td><td></td></tr><tr><td></td><td></td><td>48</td><td></td><td></td></tr><tr><td>Salaries.....</td><td></td><td>\$7, 110.00</td><td></td><td></td></tr><tr><td colspan="5">OTHER OBJECTS OF EXPENDITURE.</td></tr><tr><td>Stationery.....</td><td></td><td>250.00</td><td></td><td></td></tr><tr><td>Traveling expenses.....</td><td></td><td>1, 400.00</td><td></td><td></td></tr><tr><td>Equipment and material.....</td><td></td><td>1, 750.00</td><td></td><td></td></tr><tr><td>Telephone and telegraph service.....</td><td></td><td>3, 890.00</td><td></td><td></td></tr><tr><td>Miscellaneous items.....</td><td></td><td>600.00</td><td></td><td></td></tr><tr><td>Total.....</td><td></td><td>15, 000.00</td><td></td><td></td></tr></table>	Employees.	Rate.	Estimated, 1922.	Appropriated, 1921. ¹	Expended, 1920. ¹	Salaries:		Number.			Meteorologist.....per annum..	\$2, 160.00	1			Observer.....do.....	1, 440.00	1			Observer.....do.....	1, 260.00	1			Special observers, \$1 to \$0.50 per observation (\$2,250).....do.....	50.00	45					48			Salaries.....		\$7, 110.00			OTHER OBJECTS OF EXPENDITURE.					Stationery.....		250.00			Traveling expenses.....		1, 400.00			Equipment and material.....		1, 750.00			Telephone and telegraph service.....		3, 890.00			Miscellaneous items.....		600.00			Total.....		15, 000.00				
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Total.....		15, 000.00																																																																											
¹ No appropriation for fiscal years 1920 and 1921.																																																																													
(71) <i>For the extension of marine meteorological work, the collection of weather and water temperature reports at sea, the preparation of charts, the determining of fog zones, the distribution of marine meteorological information in the aid of navigation, and to carry out the provisions of the act of Congress approved June 17, 1910 (Thirty-sixth Statutes at Large, page 508), for the collecting and furnishing of meteorological information to the Hydrographic Office of the Navy Department for use in the preparation of pilot charts, including salaries, travel, and other expenses in the city of Washington and elsewhere (submitted) -----</i>	30, 000. 00																																																																												

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large, or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.																																																																																																																																		
<p><i>General Expenses, Weather Bureau—Continued.</i></p> <p>NOTE.—This is a new item. For many years the Weather Bureau has been engaged in the collection of meteorological reports from vessels at sea, the principal object of which has been to supply data required for the pilot charts published by the Hydrographic Office of the Navy Department, as required by law. This work has been conducted at very little expense. The placing of so many United States mercantile ships on the seas has created a greater demand than ever before for definite information pertaining to the surface meteorology of the ocean. American ships will enter all the ports of the world and they should be supplied with accurate information regarding weather, fog, and storm conditions in the interest of economy, navigation, and the preservation of ships, cargoes, and lives. The greatest service to marine interests can be secured only by more thorough and systematic attention to the work than is now possible. Employees of the Weather Bureau at stations located at important seacoast cities must visit ships, confer with vessel masters, enlist cooperative reports, check their instruments, and supply them with information. The observations as received must be tabulated, charted, and studied. Maps and bulletins must be prepared and issued containing the current meteorology of the ocean as far as possible, especially the great highways of marine travel, in order to make available accurate information as to stormy regions and occasions and to be used in connection with questions of marine disasters, admiralty cases, and the like, as well as the use thereof in the study of the general problems of meteorology and the circulation of the air.</p> <table><tr><th>Employees.</th><th>Rate.</th><th>Estimated, 1922.</th><th>Appropriated, 1921.¹</th><th>Expended, 1920.¹</th></tr><tr><td>Salaries:</td><td></td><td>Number.</td><td>Number.</td><td>Number.</td></tr><tr><td>Meteorologist.....per annum.....</td><td>\$2,520.00</td><td>1</td><td>.....</td><td>.....</td></tr><tr><td>Meteorologist.....do.....</td><td>2,160.00</td><td>1</td><td>.....</td><td>.....</td></tr><tr><td>Meteorologist.....do.....</td><td>1,620.00</td><td>4</td><td>.....</td><td>.....</td></tr><tr><td>Observer.....do.....</td><td>1,440.00</td><td>5</td><td>.....</td><td>.....</td></tr><tr><td>Observer.....do.....</td><td>1,260.00</td><td>6</td><td>.....</td><td>.....</td></tr><tr><td>Observer.....do.....</td><td>1,080.00</td><td>4</td><td>.....</td><td>.....</td></tr><tr><td>Ship observers, \$0.50 per observation (\$1,000).....do.....</td><td>12.50</td><td>80</td><td>.....</td><td>.....</td></tr><tr><td></td><td></td><td>101</td><td>.....</td><td>.....</td></tr><tr><td>Salaries.....</td><td></td><td>\$21,000.00</td><td>.....</td><td>.....</td></tr><tr><td colspan="5">OTHER OBJECTS OF EXPENDITURE.</td></tr><tr><td>Stationery.....</td><td></td><td>500.00</td><td>.....</td><td>.....</td></tr><tr><td>Traveling expenses.....</td><td></td><td>1,000.00</td><td>.....</td><td>.....</td></tr><tr><td>Equipment and material.....</td><td></td><td>5,000.00</td><td>.....</td><td>.....</td></tr><tr><td>Telephone and telegraph service.....</td><td></td><td>2,000.00</td><td>.....</td><td>.....</td></tr><tr><td>Miscellaneous items.....</td><td></td><td>500.00</td><td>.....</td><td>.....</td></tr><tr><td>Total.....</td><td></td><td>30,000.00</td><td>.....</td><td>.....</td></tr></table> <p>¹ No appropriation for fiscal years 1920 and 1921.</p> <p>In all, for general expenses</p> <table><tr><td>Appropriations for 1912.....</td><td>\$1,262,080</td><td>Estimates for 1913.....</td><td>\$1,268,330</td></tr><tr><td>Appropriations for 1913.....</td><td>1,278,750</td><td>Estimates for 1914.....</td><td>1,310,250</td></tr><tr><td>Appropriations for 1914.....</td><td>1,356,750</td><td>Estimates for 1915.....</td><td>1,317,000</td></tr><tr><td>Appropriations for 1915.....</td><td>1,340,000</td><td>Estimates for 1916.....</td><td>1,379,110</td></tr><tr><td>Appropriations for 1916.....</td><td>1,333,150</td><td>Estimates for 1917.....</td><td>1,457,400</td></tr><tr><td>Appropriations for 1917.....</td><td>1,411,200</td><td>Estimates for 1918.....</td><td>1,512,800</td></tr><tr><td>Appropriations for 1918.....</td><td>1,455,240</td><td>Estimates for 1919.....</td><td>1,573,980</td></tr><tr><td>Appropriations for 1919.....</td><td>1,583,980</td><td>Estimates for 1920.....</td><td>1,563,240</td></tr><tr><td>Appropriations for 1920.....</td><td>1,537,320</td><td>Estimates for 1921.....</td><td>1,878,840</td></tr><tr><td>Appropriations for 1921.....</td><td>1,532,100</td><td>Estimates for 1922.....</td><td>1,919,490</td></tr></table>	Employees.	Rate.	Estimated, 1922.	Appropriated, 1921. ¹	Expended, 1920. ¹	Salaries:		Number.	Number.	Number.	Meteorologist.....per annum.....	\$2,520.00	1	Meteorologist.....do.....	2,160.00	1	Meteorologist.....do.....	1,620.00	4	Observer.....do.....	1,440.00	5	Observer.....do.....	1,260.00	6	Observer.....do.....	1,080.00	4	Ship observers, \$0.50 per observation (\$1,000).....do.....	12.50	80			101	Salaries.....		\$21,000.00	OTHER OBJECTS OF EXPENDITURE.					Stationery.....		500.00	Traveling expenses.....		1,000.00	Equipment and material.....		5,000.00	Telephone and telegraph service.....		2,000.00	Miscellaneous items.....		500.00	Total.....		30,000.00	Appropriations for 1912.....	\$1,262,080	Estimates for 1913.....	\$1,268,330	Appropriations for 1913.....	1,278,750	Estimates for 1914.....	1,310,250	Appropriations for 1914.....	1,356,750	Estimates for 1915.....	1,317,000	Appropriations for 1915.....	1,340,000	Estimates for 1916.....	1,379,110	Appropriations for 1916.....	1,333,150	Estimates for 1917.....	1,457,400	Appropriations for 1917.....	1,411,200	Estimates for 1918.....	1,512,800	Appropriations for 1918.....	1,455,240	Estimates for 1919.....	1,573,980	Appropriations for 1919.....	1,583,980	Estimates for 1920.....	1,563,240	Appropriations for 1920.....	1,537,320	Estimates for 1921.....	1,878,840	Appropriations for 1921.....	1,532,100	Estimates for 1922.....	1,919,490	\$1,919,490.00	\$1,532,100.00
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Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large, or to Revised Statutes, and estimated amount required for each detailed object.						Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Weather Bureau—Continued.</i>							
(72) [A commission composed of the Secretary of Agriculture, the Secretary of the Treasury, the Secretary of War, and the Secretary of the Navy, is hereby appointed to make an examination of the premises known as Mount Weather, situated at Mount Weather, in the counties of Loudoun and Clarke, in the State of Virginia, and comprising eighty-four and eighty-one one-hundredths acres of land, more or less, together with the buildings and other improvements thereon, including laboratories, cottages, sheds, stables, shops, heating and power plant, kite shelter, and other buildings of whatever nature, together with all the rights, easements, and appurtenances thereto belonging, and to report to Congress on the first day of the next session thereof, whether said premises can be suitably used as a sanitarium or as a home for disabled soldiers, sailors, or marines, or can be profitably utilized in any other way in connection with any other governmental function, and to make such recommendation in the premises as in the judgment of the commission may be deemed to the best interest of the Government.]							
NOTE.—The above paragraph is omitted. The commission appointed will transmit its findings and recommendations to Congress as a separate report at the next session.							
<i>Statement of the proposed expenditures from the above appropriations for general expenses, Weather Bureau, for the fiscal year ending June 30, 1922, for the maintenance, repair, and operation of horse-drawn passenger-carrying vehicles, as required by section 5 of the act of July 16, 1914 (38 Stat., p. 508).</i>							
Bureau.	Horse-drawn or motor-propelled.	Appropriation.	For maintenance, repair, and operation.			Public purpose for which intended.	Officials and employees by whom used.
			Number.	Description.	Amount.		
Weather Bureau...	Horse-drawn.	General expenses Weather Bureau.	1	Surrey..	\$360	Administrative work of bureau.	Chief, and acting chief, Washington, D. C.
<i>Statement of clerks employed in District of Columbia under lump-fund appropriations for 30 days or more during the fiscal year ended June 30, 1920 (32 Stat., p. 303).</i>							
GENERAL EXPENSES, WEATHER BUREAU.							
1 clerk, \$1,200 per annum.							
2 clerks, at \$1,000 each per annum.							
Total for Weather Bureau.....						\$2, 319, 780. 00	\$1, 876, 550. 00

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large, or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
BUREAU OF ANIMAL INDUSTRY.		
<i>Salaries, Bureau of Animal Industry—</i>		
(1) One chief of bureau (increase of \$2,500) (<i>R. S., p. 87, secs. 520-523; acts Mar. 29, 1884, vol. 23, p. 31, secs. 1-11; May 31, 1920, vol. 41, p. 697, sec. 1</i>) -----	\$7, 500. 00	
NOTE.—An increase of \$2,500 in the salary of the chief of bureau is recommended. See note under item 1, page 19.		
(2) One chief clerk (<i>same acts</i>) -----	2, 500. 00	
(3) One editor and compiler (<i>same acts</i>) -----	2, 250. 00	
(4) One executive assistant (<i>same acts</i>) -----	2, 500. 00	
(5) Three clerks, at \$2,160 each (<i>submitted</i>) -----	6, 480. 00	
NOTE.—These new places and 4 clerks, at \$2,040 each, 5 clerks, at \$1,920 each, 16 clerks, at \$1,680 each, 22 clerks, at \$1,560 each, 37 clerks, at \$1,440 each, 65 clerks, at \$1,320 each, 30 clerks, at \$1,080 each, 20 clerks, at \$1,020 each, and 8 clerks, at \$900 each, are substituted for 6 executive clerks, at \$2,000 each, 15 clerks, class 3, 7 clerks, at \$1,500 each, 36 clerks, class 2, 3 clerks, at \$1,380 each, 1 clerk, \$1,300, 3 clerks, at \$1,260 each, 73 clerks, class 1, 15 clerks, at \$1,100 each, 70 clerks, at \$1,000 each, 6 clerks, at \$960 each, 1 quarantine assistant, \$900, and 10 messenger boys, at \$480 each. This readjustment involves a decrease of 37 in the number of places and of \$8,840 in the total amount. Including 3 places transferred at \$1,400 from lump funds, with increase to \$1,440 each, the net decrease due to this adjustment is \$8,720.		
The effect of these changes will be to increase the number of places above \$1,200 and \$1,400 and reduce the number below, thus making it possible to adjust the salaries of several employees in the various grades.		
The 10 messenger boy places at \$480, as well as many of the lower clerical places, are now vacant because of an inability to obtain the sort of help needed. On the other hand, it will be possible to use a few more \$900 clerks in certain positions in the field requiring less responsibility, including a number located at meat-inspection establishments, and for this purpose 8 new places of this grade are recommended. The position of quarantine assistant at \$900 has not been filled for several years. No qualified person can be found who is willing to accept this low salary.		
(6) Four clerks, at \$2,040 each (<i>submitted</i>) -----	8, 160. 00	
NOTE.—See note under item 5.		
(7) 【Six executive clerks, at \$2,000 each.】		
NOTE.—See note under item 5.		
(8) Five clerks, at \$1,920 each (<i>submitted</i>) -----	9, 600. 00	
NOTE.—See note under item 5.		
(9) Ten clerks, class 4 (<i>R. S., p. 87, secs. 520-523; acts Mar. 29, 1884, vol. 23, p. 31, secs. 1-11; May 31, 1920, vol. 41, p. 697, sec. 1</i>) -----	18, 000. 00	
(10) Sixteen clerks, at \$1,680 each (increase of 15) (<i>same acts</i>) ---	26, 880. 00	
NOTE.—See note under item 5.		
(11) One laboratory mechanic (by transfer from lump fund) (<i>same acts</i>) -----	1, 640. 00	
(12) 【Fifteen clerks, class 3.】		
NOTE.—See note under item 5.		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large, or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>Salaries, Bureau of Animal Industry—Continued.</i>		
(13) Twenty-two clerks, at \$1,560 each (<i>submitted</i>) ----- \$34,320.00		
NOTE.—See note under item 5.		
(14) 【Seven clerks, at \$1,500 each.】		
NOTE.—See note under item 5.		
(15) Forty clerks, at \$1,440 each (3 by transfer from lump fund, at \$1,400 each, with increase of \$40 each, and 37 new places) (<i>R. S., p. 87, secs. 520-523; acts Mar. 29, 1884, vol. 23, p. 31, secs. 1-11; May 31, 1920, vol. 41, p. 697, sec. 1</i>) ----- 57,600.00		
NOTE.—See note under item 5.		
(16) 【Thirty-six clerks, class 2.】		
NOTE.—See note under item 5.		
(17) 【Three clerks, at \$1,380 each.】		
NOTE.—See note under item 5.		
(18) Seventy-five clerks, at \$1,320 each (increase of 65) (<i>same acts</i>) ----- 99,000.00		
NOTE.—See note under item 5.		
(19) 【One clerk, \$1,300.】		
NOTE.—See note under item 5.		
(20) 【Three clerks, at \$1,260 each.】		
NOTE.—See note under item 5.		
(21) One hundred and twenty-seven clerks, class 1 (decrease of 73) (<i>same acts</i>) ----- 152,400.00		
NOTE.—See note under item 5.		
(22) 【Fifteen clerks, at \$1,100 each.】		
NOTE.—See note under item 5.		
(23) Forty clerks, at \$1,080 each (increase of 30) (<i>same acts</i>) ---- 43,200.00		
NOTE.—See note under item 5.		
(24) Thirty-two clerks, at \$1,020 each (increase of 20) (<i>same acts</i>) - 32,640.00		
NOTE.—See note under item 5.		
(25) 【Seventy clerks, at \$1,000 each.】		
NOTE.—See note under item 5.		
(26) 【Six clerks, at \$960 each.】		
NOTE.—See note under item 5.		
(27) Twenty clerks, at \$900 each (increase of 8) (<i>same acts</i>) ----- 18,000.00		
NOTE.—See note under item 5.		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large, or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>Salaries, Bureau of Animal Industry—Continued.</i>		
(28) One architect (<i>R. S.</i> , p. 87, secs. 520-523; acts Mar. 29, 1884, vol. 23, p. 31, secs. 1-11; May 31, 1920, vol. 41, p. 697, sec. 1) -----	\$2, 000. 00	
(29) One illustrator (<i>same acts</i>) -----	1, 400. 00	
(30) One laboratory aid (<i>same acts</i>) -----	1, 200. 00	
(31) One laboratory helper (<i>same acts</i>) -----	1, 200. 00	
(32) Six laboratory assistants, at \$1,200 each (<i>same acts</i>) -----	7, 200. 00	
(33) One laboratory mechanician (<i>same acts</i>) -----	1, 440. 00	
(34) One carpenter (<i>same acts</i>) -----	1, 140. 00	
(35) Two carpenters, at \$1,000 each (<i>same acts</i>) -----	2, 000. 00	
(36) Two messengers and custodians, at \$1,200 each (<i>same acts</i>) --	2, 400. 00	
(37) [One quarantine assistant, \$900.] NOTE.—See note under item 5.		
(38) One skilled laborer (<i>same acts</i>) -----	1, 200. 00	
(39) Three skilled laborers, at \$1,000 each (<i>same acts</i>) -----	3, 000. 00	
(40) Eleven skilled laborers, at \$900 each (<i>same acts</i>) -----	9, 900. 00	
(41) One painter (<i>same acts</i>) -----	900. 00	
(42) Fifty laborers, at \$960 each (<i>same acts</i>) -----	48, 000. 00	
(43) Two laborers, at \$900 each (<i>same acts</i>) -----	1, 800. 00	
(44) Eleven messengers or laborers, at \$840 each (<i>same acts</i>) -----	9, 240. 00	
(45) Three laborers, at \$780 each (<i>same acts</i>) -----	2, 340. 00	
(46) Twenty-nine messengers or laborers, at \$720 each (<i>same acts</i>) -	20, 880. 00	
(47) Two messenger boys, at \$660 each (<i>same acts</i>) -----	1, 320. 00	
(48) Three messenger boys, at \$600 each (<i>same acts</i>) -----	1, 800. 00	
(49) Five messenger boys, at \$540 each (<i>same acts</i>) -----	2, 700. 00	
(50) Fifteen messenger boys, at \$480 each (decrease of 10) (<i>same acts</i>) -----	7, 200. 00	
NOTE.—See note under item 5.		
(51) One charwoman (<i>same acts</i>) -----	600. 00	
(52) Two charwomen, at \$540 each (<i>same acts</i>) -----	1, 080. 00	
(53) Seventeen charwomen, at \$480 each (<i>same acts</i>) -----	8, 160. 00	
(54) Five charwomen, at \$360 each (<i>same acts</i>) -----	1, 800. 00	
(55) Two charwomen, at \$300 each (<i>same acts</i>) -----	600. 00	
(56) Seven charwomen, at \$240 each (<i>same acts</i>) -----	1, 680. 00	
	\$666, 850. 00	\$667, 230. 00

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large, or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>Salaries, Bureau of Animal Industry—Continued.</i>		
Appropriation for 1912..... \$317,450 Estimate for 1913..... \$360,430 Appropriation for 1913..... 352,450 Estimate for 1914..... 351,500 Appropriation for 1914..... 359,250 Estimate for 1915..... 352,410 Appropriation for 1915..... 347,030 Estimate for 1916..... 353,630 Appropriation for 1916..... 353,830 Estimate for 1917..... 393,470 Appropriation for 1917..... 398,470 Estimate for 1918..... 446,970 Appropriation for 1918..... 440,370 Estimate for 1919..... 479,710 Appropriation for 1919..... 479,710 Estimate for 1920..... 551,720 Appropriation for 1920..... 553,150 Estimate for 1921..... 658,790 Appropriation for 1921..... 667,230 Estimate for 1922..... 666,850		
NOTE.—Apparent decrease, \$380; actual decrease, \$6,220, as follows:		
<i>Promotions.</i>		
1 chief of bureau, from \$5,000 to \$7,500.....	\$2,500	
3 clerks, from \$1,400 to \$1,440 each.....	120	
	<hr/> \$2,620	
<i>New places.</i>		
3 clerks, at \$2,160 each.....	\$6,480	
4 clerks, at \$2,040 each.....	8,160	
5 clerks, at \$1,920 each.....	9,600	
15 clerks, at \$1,680 each.....	25,200	
22 clerks, at \$1,560 each.....	34,320	
37 clerks, at \$1,440 each.....	53,280	
65 clerks, at \$1,320 each.....	85,800	
30 clerks, at \$1,080 each.....	32,400	
20 clerks, at \$1,020 each.....	20,400	
8 clerks, at \$900 each.....	7,200	
	<hr/> 282,840	
209		285,460
<i>Places dropped.</i>		
6 executive clerks, at \$2,000 each.....	12,000	
15 clerks, class 3.....	24,000	
7 clerks, at \$1,500 each.....	10,500	
36 clerks, class 2.....	50,400	
3 clerks, at \$1,380 each.....	4,140	
1 clerk.....	1,300	
3 clerks, at \$1,260 each.....	3,780	
73 clerks, class 1.....	87,600	
15 clerks, at \$1,100 each.....	16,500	
70 clerks, at \$1,000 each.....	70,000	
6 clerks, at \$960 each.....	5,760	
1 quarantine assistant.....	900	
10 messenger boys, at \$480 each.....	4,800	
	<hr/> 291,680	
246		
Actual decrease.....		6,220
<i>Transfers from lump funds which funds have been correspondingly reduced.</i>		
1 laboratory mechanic.....	1,640	
3 clerks, at \$1,400 each.....	4,200	
	<hr/> 5,840	
Apparent decrease.....		380

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large, or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Bureau of Animal Industry—</i>		
(57) For carrying out the provisions of the act approved May 29, 1884, establishing a Bureau of Animal Industry, and the provisions of the act approved Mar. 3, 1891, providing for the safe transport and humane treatment of export cattle from the United States to foreign countries, and for other purposes; the act approved Aug. 30, 1890, providing for the importation of animals into the United States, and for other purposes; and the provisions of the act of May 9, 1902, extending the inspection of meats to process butter, and providing for the inspection of factories, marking of packages, etc.; and the provisions of the act approved Feb. 2, 1903, to enable the Secretary of Agriculture to more effectually suppress and prevent the spread of contagious and infectious diseases of live stock, and for other purposes; and also the provisions of the act approved Mar. 3, 1905, to enable the Secretary of Agriculture to establish and maintain quarantine districts, to permit and regulate the movement of cattle and other live stock therefrom, and for other purposes; and for carrying out the provisions of the act of June 29, 1906, entitled "An act to prevent cruelty to animals while in transit by railroad or other means of transportation"; and for carrying out the provisions of the act approved Mar. 4, 1913, regulating the preparation, sale, barter, exchange, or shipment of any virus, serum, toxin, or analogous products manufactured in the United States, and the importation of such products intended for use in the treatment of domestic animals; and to enable the Secretary of Agriculture to collect and disseminate information concerning live stock, dairy, and other animal products; to prepare and disseminate reports on animal industry; to employ and pay from the appropriation herein made as many persons in the city of Washington or elsewhere as he may deem necessary; to purchase in the open market samples of all tuberculin, serums, antitoxins, or analogous products, of foreign or domestic manufacture, which are sold in the United States, for the detection, prevention, treatment, or cure of diseases of domestic animals, to test the same, and to disseminate the results of said tests in such manner as he may deem best; to purchase and destroy diseased or exposed animals or quarantine the same whenever in his judgment essential to prevent the spread of pleuropneumonia, tuberculosis, or other diseases of animals from one State to another, as follows (<i>acts May 29, 1884, vol. 23, p. 31, secs. 1-11; Aug. 30, 1890, vol. 26, p. 414, secs. 1-10; Mar. 3, 1891, vol. 26, pp. 883, 1089, sec. 1; May 9, 1902, vol. 32, pp. 193-197, sec. 1; Feb. 2, 1903, vol. 32, pp. 791, 792, secs. 1-3; Mar. 3, 1905, vol. 33, p. 1264, secs. 1-6; June 29, 1906, vol. 34, p. 607, sec. 1; Mar. 4, 1913, vol. 37, p. 832, sec. 1; May 31, 1920, vol. 41, pp. 697-700, sec. 1</i>):		
(58) For inspection and quarantine work, including all necessary expenses for the eradication of scabies in sheep and cattle, the inspection of southern cattle, the supervision of the transportation of live stock and the inspection of vessels, the execution of the twenty-eight-hour law, the inspection and quarantine of imported animals, including the establishment and maintenance of quarantine stations and repairs, alterations, improvements, or additions to buildings thereon; the inspection work relative to the existence of contagious diseases, and the mallein testing of animals, [\$519,640] (<i>same acts</i>)	\$605,740.00	

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large, or to Revised Statutes, and estimated amount required for each detailed object.		Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Bureau of Animal Industry—Continued.</i>			
Appropriation for 1912.....	\$592,700	Estimate for 1913.....	\$592,700
Appropriation for 1913.....	600,000	Estimate for 1914.....	654,000
Appropriation for 1914.....	654,000	Estimate for 1915.....	640,520
Appropriation for 1915.....	625,520	Estimate for 1916.....	607,780
Appropriation for 1916.....	607,780	Estimate for 1917.....	607,780
Appropriation for 1917.....	532,780	Estimate for 1918.....	603,280
Appropriation for 1918.....	628,280	Estimate for 1919.....	683,550
Appropriation for 1919.....	503,662	Estimate for 1920.....	495,282
Appropriation for 1920.....	525,000	Estimate for 1921.....	557,660
Appropriation for 1921.....	519,640	Estimate for 1922.....	605,740

NOTE.—An increase of \$86,100 is recommended in this item for the following purposes:

(a) \$10,000 for cooperative work in the eradication of sheep scabies. The Bureau of Animal Industry now cooperates with 21 States in sheep scabies work by inspecting animals, providing quarantine and other control measures, and by supervision of the dipping of diseased or exposed animals. The territory released from quarantine amounts to 1,729,016 square miles, leaving 56,329 square miles still under Federal quarantine. Sheep scabies infection is widely scattered, and the complete elimination of the disease can be accomplished only by close cooperation between department inspectors at market centers, those in the field, and State live-stock sanitary officials. Additional funds will be required to handle new outbreaks which have recently occurred in some of the larger sheep-producing States, including several of the western range States.

(b) \$15,000 for cooperative work in the eradication of mange (scabies) of cattle and horses. This work, which consists of providing quarantine measures and demonstrating proper methods of treatment, including the cleaning and disinfection of cars, pens, and other premises, is now conducted in cooperation with 12 States. The disease is quite prevalent in the southwestern and northwestern range States, but present funds are inadequate to enable the department to extend its cooperative assistance in those sections.

(c) \$35,000 for extending the supervision of interstate transportation of live stock and inspection of southern cattle outside the quarantined area. The work is located at some 75 cities throughout the country. It consists of the examination and inspection of live stock unloaded at market centers and public stockyards to determine the presence of communicable diseases; supervision of the inoculation against hog cholera of swine for interstate movement from stockyards; inquiry into violations of quarantine regulations, and issuance of certificates covering interstate movement of animals. There has been a steady increase in the volume of work that must be performed under this project, and the cost of maintaining the service has also advanced. Requests by State officials for inspection at several additional points have been received, but the department has been unable to extend the service because of insufficient funds.

(d) \$2,000 for preparing test outfits for sheep and cattle dip, preparing mallein, and investigating dips and disinfectants. More test outfits are needed than the department can now supply. It is also desired to extend research work looking to the preparation of cheaper and better disinfectants.

(e) \$24,100 for the quarantine of imported animals. Of this amount, \$15,000 is needed for improvements and repairs to the quarantine stations maintained in Boston, New York, and Chicago. Practically no repairs have been made at these stations for several years, and, with the prospect that the importation of breeding stock will increase, it is highly necessary that the numerous buildings be put in shape to properly house the animals. Additional funds are also needed in connection with the increased work anticipated in the inspection of imported animals and hides and other animal by-products, and the work of vessel inspection.

Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.
Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>
Chief of division..... per annum..	\$4,000.00	1	1	
Chief of division.....do.....	3,000.00			1
Chief of division.....do.....	3,750.00	1	1	
Chief of division.....do.....	3,500.00			1
Assistant chief of division.....do.....	3,240.00	1	1	
Assistant chief of division.....do.....	2,760.00			1
Biochemist.....do.....	3,600.00	1	1	
Biochemist.....do.....	3,240.00			1
Inspector.....do.....	3,500.00	1	1	1
Inspector.....do.....	3,240.00	1	1	
Inspector.....do.....	3,060.00			
Inspector.....do.....	3,000.00	4	4	
Inspector.....do.....	2,500.00	6	6	4
Inspector.....do.....	2,460.00	1	1	1
Inspector.....do.....	2,400.00	1	1	1
Inspector.....do.....	2,340.00			1
Inspector.....do.....	2,280.00	1	1	

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large, or to Revised Statutes, and estimated amount required for each detailed object.					Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
General Expenses, Bureau of Animal Industry—Continued.						
Employees.		Rate.	Esti- mated, 1922.	Appro- priated, 1921.	Ex- pended, 1920.	
Salaries—Continued.			Number.	Number.	Number.	
Inspector.....	per annum..	\$2,250.00			1	
Inspector.....	do.....	2,220.00	3	3		
Inspector.....	do.....	2,160.00	2	2	1	
Inspector.....	do.....	2,100.00	38	38	1	
Inspector.....	do.....	2,040.00	2	2	1	
Inspector.....	do.....	2,020.00			1	
Inspector.....	do.....	1,995.00	1	1		
Inspector.....	do.....	1,920.00	35	20	43	
Inspector.....	do.....	1,850.00			1	
Inspector.....	do.....	1,800.00	23	19	3	
Inspector.....	do.....	1,740.00			3	
Inspector.....	do.....	1,720.00			2	
Inspector.....	do.....	1,700.00			6	
Inspector.....	do.....	1,680.00	5	5	1	
Inspector.....	do.....	1,620.00	1	1	3	
Inspector.....	do.....	1,520.00			1	
Inspector.....	do.....	1,500.00	45	45	14	
Inspector.....	do.....	1,400.00	1	1	1	
Inspector.....	do.....	1,380.00	37	25	16	
Inspector.....	do.....	1,320.00	5	5	34	
Inspector.....	do.....	1,260.00			8	
Inspector.....	do.....	1,200.00	2	2	29	
Inspector.....	do.....	1,100.00			2	
Inspector.....	do.....	1,080.00	1	1	1	
Inspector.....	do.....	1,000.00			1	
Inspector.....	per diem..	12.00	1	1	1	
Inspector.....	do.....	10.00	1	1	1	
Inspector.....	do.....	6.00			1	
Bacteriologist.....	per annum..	2,340.00			1	
Assistant.....	do.....	2,220.00	1	1		
Assistant.....	do.....	2,160.00	2	2		
Assistant.....	do.....	1,800.00			1	
Agent.....	do.....	1,920.00			2	
Agent.....	do.....	1,680.00	2	2		
Agent.....	do.....	1,500.00			3	
Agent.....	do.....	1,440.00			1	
Agent.....	do.....	1,390.00	2	2	2	
Agent.....	do.....	1,200.00	2	2	2	
Agent.....	per month..	60.00	1	1	1	
Agent.....	per diem..	5.00	1	1	1	
Husbandman.....	per annum..	1,800.00	1	1	1	
Clerk.....	do.....	1,500.00			1	
Clerk.....	do.....	1,400.00	1			
Clerk.....	do.....	1,200.00			2	
Laboratory helper.....	do.....	1,200.00	1	1	1	
Microscopist.....	do.....	1,200.00	1	1		
Microscopist.....	do.....	1,040.00			1	
Power plant operator.....	do.....	1,320.00	1	1	1	
Engineer.....	do.....	1,200.00	1	1		
Collaborator.....	do.....	5.00	1	1	1	
Wages:						
Laborer (temporary).....	do.....	1,400.00	1	1		
Laborer (temporary).....	do.....	1,200.00	1	1		
Miscellaneous temporary labor, \$3 to \$2.....	per diem..				7	
			240	211	251	
Salaries.....			\$424,675.00	\$376,275.00	\$379,065.09	
Wages.....			1,500.00	1,500.00	1,375.50	
OTHER OBJECTS OF EXPENDITURE.						
Traveling expenses.....			127,400.00	120,000.00	113,018.94	
Equipment and material.....			32,000.00	5,000.00	8,497.31	
Telephone and telegraph service.....			3,000.00	3,000.00	2,419.16	
Miscellaneous items.....			17,165.00	13,865.00	19,722.80	
Total.....			605,740.00	519,640.00	524,098.80	

(59) For investigating the disease of tuberculosis of animals, for its control and eradication, for the tuberculin testing of animals, and for researches concerning the cause of the disease, its modes of spread, and methods of treatment and prevention, including demonstrations, the formation of organizations, and such other means as may be necessary, either independently or in cooperation with farmers, associations, State, Territory, or county authorities, **[\$1,480,440] \$1,978,800** [of which \$800,000 shall be set aside for administrative and operating expenses, \$100,000 of which shall be immediately available, and \$680,440 for the payment of indemnities]: *Provided, however,* That in carrying out the purpose of this appropriation, if in the opinion of the Secretary of Agriculture, it shall be necessary to destroy tuberculous animals and to compensate owners for

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<p><i>General Expenses, Bureau of Animal Industry—Continued.</i></p> <p>loss thereof, he may, in his discretion, and in accordance with such rules and regulations as he may prescribe, expend in the city of Washington or elsewhere out of the moneys of this appropriation, such sums as he shall determine to be necessary, within the limitations above provided, for the reimbursement of owners of animals so destroyed, in cooperation with such States, Territories, counties, or municipalities, as shall by law or by suitable action in keeping with its authority in the matter, and by rules and regulations adopted and enforced in pursuance thereof, provide inspection of tuberculous animals and for compensation to owners of animals so destroyed, but no part of the money hereby appropriated shall be used in compensating owners of such animals except in cooperation with and supplementary to payments to be made by State, Territory, county, or municipality where condemnation of such animals shall take place; nor shall any payment be made hereunder as compensation for or on account of any such animal destroyed if at the time of inspection or test of such animal, or at the time of condemnation thereof, it shall belong to or be upon the premises of any person, firm, or corporation, to which it has been sold, shipped, or delivered for the purpose of being slaughtered: <i>Provided further</i>, That out of the money hereby appropriated no payment as compensation for any tuberculous animal destroyed shall exceed one-third of the difference between the appraised value of such animal and the value of the salvage thereof; that no payment hereunder shall exceed the amount paid or to be paid by the State, Territory, county, or municipality, where the animal shall be condemned; and that in no case shall any payment hereunder be more than \$25 for any grade animal or more than \$50 for any pure-bred animal, and no payment shall be made unless the owner has complied with all lawful quarantine regulations [<i>And provided further</i>, That the act approved May 29, 1884 (Twenty-third Statutes at Large, page 31), be, and the same is hereby, amended to permit hereafter cattle which have reacted to the tuberculin test to be shipped, transported, or moved from one State, Territory, or the District of Columbia, to any other State, Territory, or the District of Columbia, for immediate slaughter, in accordance with such rules and regulations as shall be prescribed by the Secretary of Agriculture: <i>And provided further</i>, That hereafter the Secretary of Agriculture may, in his discretion, and under such rules and regulations as he may prescribe, permit cattle which have been shipped for breeding or feeding purposes from one State, Territory, or the District of Columbia, to another State, Territory, or the District of Columbia, and which have reacted to the tuberculin test subsequent to such shipment, to be reshipped in interstate commerce to the original owner] (acts May 29, 1884, vol. 23, p. 31, secs. 1-11; Aug. 30, 1890, vol. 26, p. 414, secs. 1-10; Mar. 3, 1891, vol. 26, pp. 883, 1089, sec. 1; May 9, 1902, vol. 32, pp. 193-197, sec. 1; Feb. 2, 1903, vol. 32, pp. 791, 792, secs. 1-3; Mar. 3, 1905, vol. 33, p. 1264, secs. 1-6; June 29, 1906, vol. 34, p. 607, sec. 1; Mar. 4, 1913, vol. 37, p. 832, sec. 1; May 31, 1920, vol. 41, pp. 697-700, sec. 1) -----</p> <p>Appropriation for 1919..... \$500,000 | Estimate for 1920..... \$493,520 Appropriation for 1920..... 1,500,000 | Estimate for 1921..... 1,480,440 Appropriation for 1921..... 1,480,440 | Estimate for 1921..... 1,978,800</p> <p>\$1,978,800.00</p>		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.					Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Bureau of Animal Industry—Continued.</i>						
<p>NOTE.—There is an apparent increase in this item of \$498,360, but taking into consideration the transfer to the statutory roll of 1 laboratory mechanician at \$1,640 the actual increase is \$590,000.</p> <p>Tuberculosis is one of the greatest handicaps to the live stock industry of America. It takes an enormous toll annually and it is highly essential that the efforts to eliminate it from our herds should be prosecuted as vigorously as possible. Demands for the eradication of the disease from herds of pure bred and grade cattle have increased to such an extent, that in practically every State hundreds of applications from live stock owners must be held up for weeks because of an insufficient number of inspectors to make the tests promptly. Every pure-bred cattle breeding association in the United States has approved this project. In order that satisfactory progress may be made in the eradication of tuberculosis, the work must be extended to circumscribed areas, to be freed from the disease and protected against the introduction of new infection. Cattle from accredited herds to-day sell for from 25 to 40 per cent more than cattle from herds the health of which is unknown.</p> <p>The clause setting aside specific amounts for administrative and operating expenses and for the payment of indemnities has been omitted. This is an unnecessary restriction which does not make for efficiency or progress. It is impossible to foresee the amount that will be required for indemnity purposes. This will depend on the scope of the work and the number of animals tested and condemned.</p> <p>The last two provisos in the present paragraph are omitted as they are permanent legislation.</p>						
Employees.	Rate.	Estimated, 1922.	Appropri- ated, 1921.	Expended, 1920.		
Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>		
Chief of division.....per annum..	\$1,000.00	1	1			
Chief of division.....do.....	3,500.00			1		
Assistant (administrative).....do.....	3,000.00	2	2			
Assistant chief of division.....do.....	2,700.00	1	1	1		
Biochemist.....do.....	3,600.00	1	1			
Biochemist.....do.....	3,210.00			1		
Bacteriologist.....do.....	3,000.00	1	1			
Bacteriologist.....do.....	2,940.00			1		
Bacteriologist.....do.....	2,280.00	1	1			
Bacteriologist.....do.....	2,160.00			1		
Bacteriologist.....do.....	1,200.00			1		
Inspector.....do.....	2,880.00	1	1			
Inspector.....do.....	2,760.00	1	1			
Inspector.....do.....	2,500.00	15	15			
Inspector.....do.....	2,400.00	1	1	3		
Inspector.....do.....	2,340.00	4	4	3		
Inspector.....do.....	2,280.00	3	3	1		
Inspector.....do.....	2,220.00	1	1	1		
Inspector.....do.....	2,160.00	17	2	2		
Inspector.....do.....	2,100.00	34	34	1		
Inspector.....do.....	2,040.00	22	7	8		
Inspector.....do.....	2,020.00			2		
Inspector.....do.....	2,000.00			1		
Inspector.....do.....	1,920.00	57	40	36		
Inspector.....do.....	1,860.00			2		
Inspector.....do.....	1,800.00	80	65	6		
Inspector.....do.....	1,750.00	1	1			
Inspector.....do.....	1,740.00	18	2	6		
Inspector.....do.....	1,720.00			2		
Inspector.....do.....	1,700.00			3		
Inspector.....do.....	1,680.00	27	11	3		
Inspector.....do.....	1,620.00	3	3	92		
Inspector.....do.....	1,500.00	12	12	11		
Inspector.....do.....	1,440.00	1	1			
Inspector.....do.....	1,380.00	2	2	1		
Inspector.....do.....	1,350.00			1		
Inspector.....do.....	1,320.00	1	1	4		
Inspector.....do.....	1,260.00			1		
Inspector.....do.....	1,200.00			1		
Laboratory assistant.....do.....	1,620.00	1	1			
Laboratory assistant.....do.....	1,400.00			1		
Clerk.....do.....	1,200.00			13		
Clerk.....do.....	1,000.00			1		
Clerk.....do.....	900.00		1			
Wages:						
Laborer.....do.....	1,460.00	1	1			
Laborer.....do.....	1,400.00	2	2			
Laborer.....do.....	1,000.00			1		
Laborer.....do.....	600.00	2	2			
		314	221	213		
Salaries.....		\$601,357.00	\$423,950.00	\$357,026.63		
Wages.....		5,460.00	5,460.00	1,000.00		
OTHER OBJECTS OF EXPENDITURE.						
Stationery.....		1,500.00	1,500.00	1,144.37		
Traveling expenses.....		217,550.00	175,000.00	119,283.34		
Equipment and material.....		93,450.00	45,000.00	35,238.24		
Telephone and telegraph service.....		2,000.00	2,000.00	1,513.04		
Miscellaneous items (includes indemnities).....		1,057,483.00	827,530.00	618,297.43		
Total.....		1,978,800.00	1,480,440.00	1,133,503.05		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Bureau of Animal Industry—Continued.</i>		
<p>(60) For all necessary expenses for the eradication of southern cattle ticks, [\$681,160] \$701,160: <i>Provided</i>, That no part of this appropriation shall be used for the purchase of animals or in the purchase of materials for or in the construction of dipping vats upon land not owned solely by the United States, except at fairs or expositions where the Department of Agriculture makes exhibits or demonstrations; nor shall any part of this appropriation be used in the purchase of materials or mixtures for use in dipping vats except in experimental or demonstration work carried on by the officials or agents of the Bureau of Animal Industry (<i>acts May 29, 1884, vol. 23, p. 31, secs. 1-11; Aug. 30, 1890, vol. 26, p. 414, secs. 1-10; Mar. 3, 1891, vol. 26, pp. 883, 1089, sec. 1; May 9, 1902, vol. 32, pp. 193-197, sec. 1; Feb. 2, 1903, vol. 32, pp. 791, 792, secs. 1-3; Mar. 3, 1905, vol. 33, p. 1264, secs. 1-6; June 29, 1906, vol. 34, p. 607, sec. 1; Mar. 4, 1913, vol. 37, p. 832, sec. 1; May 31, 1920, vol. 41, pp. 697-700, sec. 1</i>) -----</p>	\$701, 160. 00	
<p>Appropriation for 1912..... \$250,000 Appropriation for 1913..... 250,000 Appropriation for 1914..... 325,000 Appropriation for 1915..... 400,000 Appropriation for 1916..... 438,800 Appropriation for 1917..... 632,400 Appropriation for 1918..... 631,560 Appropriation for 1919..... 750,000 Appropriation for 1920..... 741,980 Appropriation for 1921..... 681,160</p>	<p>Estimate for 1913..... \$250,000 Estimate for 1914..... 300,000 Estimate for 1915..... 400,000 Estimate for 1916..... 398,800 Estimate for 1917..... 657,400 Estimate for 1918..... 631,500 Estimate for 1919..... 620,420 Estimate for 1920..... 741,980 Estimate for 1921..... 731,160 Estimate for 1922..... 701,160</p>	

NOTE.—An increase of \$20,000 is requested in the above item in order to intensify the campaign for tick eradication in the area still under quarantine and to meet the higher cost of travel, labor, and other items of expenditure. Since the tick eradication work began in 1906, 70 per cent of the area known to be tick-infested has been freed from this pest and released from quarantine. In portions of the released area, however, there are a few infested premises or centers of tick infestations which must be held under control until complete eradication is effected. This condition, taken in conjunction with the effort to eradicate ticks from additional areas still under quarantine, means that the Federal and State funds available must be spread very thinly over a large territory and over a very large amount of work. In order to hasten the work and make it more effective, additional inspectors should be provided in several States.

Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.
Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>
Chief of division.....per annum..	\$4,000.00	1	1	1
Chief of division.....do.....	3,500.00	1	1	1
Assistant chief of division.....do.....	3,000.00	1	1	1
Husbandman.....do.....	3,000.00			1
Husbandman.....do.....	2,500.00			1
Husbandman.....do.....	2,040.00			1
Husbandman.....do.....	1,800.00			1
Husbandman.....do.....	1,680.00			1
Husbandman.....do.....	1,620.00			1
Husbandman.....do.....	1,480.00			1
Husbandman.....do.....	1,320.00			1
Husbandman.....do.....	480.00			1
Specialist.....do.....	1,980.00			1
Assistant.....do.....	2,700.00			1
Assistant.....do.....	1,500.00			3
Assistant.....do.....	1,380.00			1
Inspector.....do.....	3,000.00	3	3	1
Inspector.....do.....	2,880.00	1	1	3
Inspector.....do.....	2,700.00			1
Inspector.....do.....	2,500.00	2	2	3
Inspector.....do.....	2,460.00			1
Inspector.....do.....	2,400.00	2	2	1
Inspector.....do.....	2,340.00			1
Inspector.....do.....	2,280.00	1	1	1
Inspector.....do.....	2,160.00	17	17	1
Inspector.....do.....	2,100.00	19	19	2
Inspector.....do.....	2,040.00	10	10	1
Inspector.....do.....	2,000.00			1
Inspector.....do.....	1,980.00			1
Inspector.....do.....	1,920.00	51	51	21
Inspector.....do.....	1,860.00			5
Inspector.....do.....	1,800.00	23	23	10
Inspector.....do.....	1,740.00			9
Inspector.....do.....	1,720.00			2

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.					Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Bureau of Animal Industry—Continued.</i>						
Employees.	Rate.	Esti- mated, 1922.	Appro- priated, 1921.	Ex- pended, 1920.		
Salaries—Continued.		Number.	Number.	Number.		
Inspector.....per annum	\$1,700.00			18		
Inspector.....do.	1,683.00	7	7	1		
Inspector.....do.	1,620.00	1	1	66		
Inspector.....do.	1,500.00	11	11	12		
Inspector.....do.	1,380.00	1	1			
Inspector.....do.	1,320.00	2	2	10		
Inspector.....do.	1,200.00			1		
Inspector.....do.	1,080.00			2		
Agent.....do.	2,400.00			1		
Agent.....do.	2,040.00	1	1			
Agent.....do.	1,920.00	3	3	4		
Agent.....do.	1,860.00			1		
Agent.....do.	1,800.00	1	1	1		
Agent.....do.	1,740.00	3	3			
Agent.....do.	1,700.00			2		
Agent.....do.	1,680.00			1		
Agent.....do.	1,620.00	1	1	2		
Agent.....do.	1,560.00			2		
Agent.....do.	1,500.00	1	1	2		
Agent.....do.	1,440.00	1	1			
Agent.....do.	1,380.00	14	14	3		
Agent.....do.	1,320.00	22	22	2		
Agent.....do.	1,260.00	7	7			
Agent.....do.	1,200.00	21	18	60		
Agent.....do.	1,180.00			1		
Agent.....do.	1,140.00			2		
Agent.....do.	1,080.00	10	10	17		
Agent.....do.	1,020.00			1		
Agents, \$960 to \$12.....do.		19	19	31		
Chemist.....do.	1,740.00	1	1			
Chemist.....do.	1,680.00			1		
Chemist.....do.	1,560.00			1		
Laboratory mechanician.....do.	1,640.00	1	1			
Illustrator.....do.	1,600.00	1	1			
Clerk.....do.	1,400.00	1	1			
Clerk.....do.	1,200.00			11		
Clerk.....do.	1,080.00			1		
Clerk.....do.	1,000.00			2		
Wages:						
Laborers, \$600 to \$540.....do.		2	2			
Miscellaneous temporary labor, per dime \$4.50 to \$3.....do.		3	3	4		
		266	263	338		
Salaries.....		\$417,668.00	\$405,068.00	\$444,239.78		
Wages.....		3,500.00	3,500.00	5,044.50		
OTHER OBJECTS OF EXPENDITURE.						
Stationery.....		1,000.00	1,000.00	715.97		
Traveling expenses.....		252,400.00	245,000.00	257,900.45		
Equipment and material.....		10,000.00	10,000.00	15,052.49		
Telephone and telegraph service.....		1,500.00	1,500.00	1,451.43		
Miscellaneous items.....		15,092.00	15,092.00	16,430.42		
Total.....		701,160.00	681,160.00	740,835.04		
(61) For all necessary expenses for investigations and experiments in dairy industry, including repairs, alterations, improvements, additions to, and erection of buildings absolutely necessary to carry on experiments, including the employment of labor in the city of Washington and elsewhere, cooperative investigations of the dairy industry in the various States, and inspection of renovated-butter factories [and markets, \$325,000] (acts May 29, 1884, vol. 23, p. 31, secs. 1-11; Aug. 30, 1890, vol. 26, p. 414, secs. 1-10; Mar. 3, 1891, vol. 26, pp. 883, 1089, sec. 1; May 9, 1902, vol. 32, pp. 193-197, sec. 1; Feb. 2, 1903, vol. 32, pp. 791, 792, secs. 1-3; Mar. 3, 1905, vol. 33, p. 1264, secs. 1-6; June 29, 1906, vol. 34, p. 607, sec. 1; Mar. 4, 1913, vol. 37, p. 832, sec. 1; May 31, 1920, vol. 41, pp. 697-700, sec. 1).....					\$498,000.00	
Appropriation for 1912.....	\$150,000	Estimate for 1913.....	\$177,900			
Appropriation for 1913.....	177,900	Estimate for 1914.....	200,000			
Appropriation for 1914.....	177,900	Estimate for 1915.....	256,490			
Appropriation for 1915.....	256,490	Estimate for 1916.....	258,090			
Appropriation for 1916.....	254,090	Estimate for 1917.....	272,470			
Appropriation for 1917.....	277,470	Estimate for 1918.....	378,930			
Appropriation for 1918.....	378,930	Estimate for 1919.....	364,390			
Appropriation for 1919.....	364,390	Estimate for 1920.....	350,370			
Appropriation for 1920.....	350,370	Estimate for 1921.....	390,800			
Appropriation for 1921.....	325,000	Estimate for 1922.....	498,000			

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large, or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<p><i>General Expenses, Bureau of Animal Industry—Continued.</i></p> <p>NOTE.—There is an apparent increase in this item of \$173,000, but taking into consideration the transfer to the statutory roll of 1 clerk, class 2, the actual increase is \$174,400. It is proposed to expend this amount as follows:</p> <p>(a) \$15,110 for southern dairy work. During the past year there was expended for this work, in addition to an allotment of \$10,200 from the item for dairy investigations, the sum of \$25,000 carried in the appropriation for live-stock demonstration work in tick-free areas, which Congress eliminated at the last session. This action made it necessary to withdraw almost completely from the dairy extension work in the South. There is an urgent demand for the restoration of these activities.</p> <p>(b) \$11,600 for improvement of dairy products. Immense quantities of butter and cheese are made on the farms of the United States, but much of it of poor quality. Milk is not utilized to the extent that it should be. It is estimated that one farm in six in this country has no cows for producing milk for the farm family. Billions of pounds of skim milk not now fully utilized could and should be converted into palatable and nutritious food products. Considerable work along these lines has already been done by the department, with excellent results. Curtailment in funds, however, has made it necessary to reduce the number of specialists engaged in the work, so that the department is able to comply with only a small percentage of the requests for assistance.</p> <p>(c) \$20,000 for cow-testing association work. Owing to reduced funds, it became necessary this year to discontinue work under this project in 16 States. Wherever cow-testing association work has been efficiently supervised by trained dairy specialists it has been very profitable to the farmers, as it has been the effective medium for teaching the best dairy practices. In addition to increasing the number of associations, the work could be greatly improved through systematic campaigns for the elimination of unprofitable cows and scrub bulls, cooperative purchase of feed, production of the most suitable home-grown rations, proper sanitation, etc.</p> <p>(d) \$18,460 for bull association work. Like the cow-testing association work, the demands for the bull association work are much greater than the department is able to meet. The increase requested will make it possible to extend it to additional areas where it is urgently needed.</p> <p>(e) \$4,500 for western dairy manufacturing work. It has been found that a fine quality of cheese can be manufactured in many of the irrigated sections of the West where the nights are cool and a good supply of water is available. Many requests have been received for the assistance of the Dairy Division, and it is important that proper direction be given to newly organized cheese factories while the industry is being developed.</p> <p>(f) \$6,600 for work relating to Swiss and other foreign cheeses. Fully 80 per cent of the Swiss cheese now produced by American factories (about 500 in number) sells as seconds, or below, at a price of from 7 to 15 cents per pound less than "Fancy" and No. 1. The Dairy Division has developed methods for the manufacture of Swiss cheese which insures a larger per cent "Fancy" and No. 1. The department's work on Roquefort and Camembert cheese also has advanced to the point where it is ready for introduction into factories. Assistance, however, is required in the factories to demonstrate the use of the pure cultures and the methods of manufacturing and curing, and to give advice regarding equipment, etc. An effort will be made to secure specialists in cheese making who are familiar with the manufacture of Roquefort and Camembert as well as Swiss cheese, in order that the new methods of making all these cheeses may be demonstrated at the same time.</p> <p>(g) \$8,000 for creamery management investigations. The manufacturing cost of the various dairy products and by-products has received very little study. It is planned to make such studies at Grove City, Pa., first and then extend the work to other butter and cheese factories. It is also proposed to assign one man to study the various operations of manufacture to determine the most efficient methods. Another project requiring attention is that of sanitation. Many State laws forbid the discharge of creamery water into streams. Experiments conducted at Grove City have proved that the regular type of septic tank is unsatisfactory for this purpose. A modified system has been devised which has proven successful, and it is proposed to demonstrate the installation and operation of the system so that the results may be available to other factories.</p> <p>(h) \$14,000 for the investigation of butter by-products. These products contain over 1,500,000,000 pounds of valuable human food now utilized inefficiently or entirely wasted. With the sum requested it is proposed to investigate methods of making low-fat cheeses, of manufacturing condensed skim milk in various forms, of separating albumen from whey, and of developing fermentation products from milk sugar, etc.</p>		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large, or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Bureau of Animal Industry—Continued.</i>		
<p>(i) \$18,000 for milk condensing investigations. The lack of fundamental information regarding milk condensing is evidenced by the large losses in condensed and evaporated milk due to fermentation, improper sterilization, and other defects. When dairy conditions return to normal, domestic condensers will be obliged to meet foreign competition. It is very important, therefore, to reduce the cost of manufacturing and to eliminate spoilage. This can be done only through comprehensive investigation. The increase requested will provide at the Grove City creamery a complete equipment for making evaporated milk under commercial conditions, which will make it possible to test on a commercial scale new methods or processes developed in the laboratories, provide facilities for long-time factory investigations which can not be conducted in the laboratory, and afford opportunity for training field men by actual experience in a condensery using methods regarding which the department desires to disseminate information.</p>		
<p>(j) \$15,000 for investigating the nutrition of dairy cows. Recent investigations have thrown an entirely new light on feeding standards and have modified not only existing conceptions of food requirements but also methods of investigation. It is now established that it is not sufficient to feed a certain amount and proportion of protein, fat, and carbohydrates. The nature of protein is extremely important, and even the mineral matter of the feed, previously ignored, is now known to be a very essential part of the feed. The study of the relation of milk production to the composition of the ration has uncovered a number of problems which require further investigation. The effect of increasing average milk yield is so important that this work could be very profitably expanded.</p>		
<p>(k) \$8,000 for cheese manufacturing investigations. In normal times over 25,000,000 pounds of Italian and Greek cheese are imported annually by the United States. These cheeses are for the most part made from skim or partly skim milk but usually bring a good price. If methods for their manufacture in this country could be developed and standardized, a profitable outlet for a considerable volume of skim milk would be provided and progress made toward the solution of the problem of the periodical surplus of city milk. One man should be employed to make the routine chemical determinations and to further develop and standardize the methods of Roquefort and Camembert cheese manufacture, and another to develop the possibilities of a more extensive use of cheese of this type in our domestic practice. This work will include an attempt to develop skim or part skim milk cheese of a new type possessing some of the attractive characteristics of the whole milk cheeses without the undesirable physical properties of the ordinary skim cheese. Three men with general training should be secured to make cheese of the different varieties, and after a year or two they should be qualified to assist in demonstrating proper methods of manufacturing these cheeses. The estimates also provide for the employment of a bacteriologist to do routine work in the preparation of cultures.</p>		
<p>(l) \$3,200 for dairy sanitation research. There are many problems connected with dairy sanitation which require investigation, including proper methods of cleaning and operation of milking machines, types of containers, etc.</p>		
<p>(m) \$2,530 for investigations of milk-plant management. An additional man is needed for the effective prosecution of the work in connection with the study of technical processes requisite for the economical handling of market milk in cities, and to assist various cooperative distributing plants which have been established partly through the department's efforts and whose success is dependent upon its assistance during their initial stages. The plan is to concentrate effort on a few plants with the idea of making the results available to others.</p>		
<p>(n) \$12,000 for supervision and maintenance at Beltsville experiment farm. Comprehensive breeding and feeding experiments of immense importance from the standpoint of economical milk production are under way at the Beltsville (Md.) farm of the Bureau of Animal Industry. The breeding projects require that the offspring be kept under the same conditions as their parents until their producing ability can be measured. New investigations in nutrition require more animals. For both these reasons the herd is increasing and this means larger expense for supervision and maintenance. So much of the products as are needed for the experimental laboratories in Washington are used, the balance being sold and the proceeds returned to the Treasury. Additional feed and bedding and more supplies and equipment must be provided, as well as additional labor to care for the animals. A number of miscellaneous improvements are also needed in connection with the dairy work at Beltsville, including the construction of additional tile drains, repairs to roads, new machinery, lime, fertilizer, and other equipment.</p>		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large, or to Revised Statutes, and estimated amount required for each detailed object.					Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Bureau of Animal Industry—Continued.</i>						
(o) \$18,000 for dairy cattle breeding investigations. The present high cost of feeds and labor emphasizes the necessity of uniformly high production in our dairy herds. To this end more information is needed regarding the principles governing the transmission of milk and butter-fat producing qualities. The Dairy Division has undertaken three comprehensive breeding experiments the results of which, it is hoped, will throw some light on the most desirable method of breeding to follow in order to secure uniformly high producing animals. The animals have been assembled for two of these experiments, and funds are needed for the purchase of animals for the third. Special and uniform care is required for animals in breeding experiments, which necessitates additional labor. The experimental work also requires that the females be retained, and in order to have them under the same conditions it will be necessary to enlarge the herd each year to a considerable extent.						
The language of the paragraph has been amended by the insertion of authority for repairs, alterations, improvements, additions to, and erection of buildings, in order to facilitate the dairy investigations and to provide specific legal authority for erecting and repairing buildings to meet the requirements of the work. Similar authority has been carried for a number of years in the item for animal husbandry investigations.						
Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.		
Salaries:		Number.	Number.	Number.		
Chief of division..... per annum	\$4,500.00	1	1	1		
Assistant chief of division..... do	4,000.00	1	1	1		
Cytologist..... do	4,000.00	1				
Bacteriologist..... do	4,000.00	1	1			
Bacteriologist..... do	3,600.00	1	1	1		
Bacteriologist..... do	3,500.00			1		
Bacteriologist..... do	2,500.00	1				
Bacteriologist..... do	2,460.00	1	1			
Bacteriologist..... do	2,220.00	1	1			
Bacteriologist..... do	2,200.00			1		
Bacteriologist..... do	1,980.00			1		
Bacteriologist (temporary)..... do	1,880.00			1		
Bacteriologist..... do	1,620.00	1	1			
Bacteriologist..... do	1,440.00			1		
Husbandman..... do	4,000.00	1	1			
Husbandman..... do	3,180.00	1	1			
Husbandmen..... do	3,000.00	3	1	1		
Husbandmen..... do	2,880.00	2	2	1		
Husbandmen..... do	2,700.00	4	4			
Husbandmen..... do	2,520.00	1	1	2		
Husbandman..... do	2,500.00			1		
Husbandman..... do	2,460.00			1		
Husbandmen..... do	2,400.00	5	2	1		
Husbandman..... do	2,280.00			1		
Husbandmen..... do	2,200.00			2		
Husbandmen..... do	2,100.00	1	1	2		
Husbandmen..... do	2,000.00	2		1		
Husbandmen..... do	1,800.00	4	1	2		
Husbandman (temporary)..... do	1,650.00			1		
Husbandmen..... do	1,620.00			3		
Husbandman (temporary)..... do	1,600.00			1		
Husbandman (temporary)..... do	1,520.00			1		
Husbandman..... do	1,500.00			1		
Husbandmen (temporary)..... do	1,440.00			2		
Husbandman..... do	120.00	1	1			
Physiologist..... do	3,600.00	1	1			
Physiologist..... do	3,240.00			1		
Chemist..... do	3,600.00			1		
Chemist..... do	3,500.00	1				
Chemist..... do	3,420.00	1	1			
Chemist..... do	3,000.00	1				
Chemist..... do	2,500.00	1	1			
Chemist..... do	2,400.00	1		1		
Chemist..... do	2,100.00	1	1			
Chemist..... do	2,040.00	1	1			
Chemist..... do	1,880.00	1	1	1		
Chemist..... do	1,920.00			1		
Chemists..... do	1,800.00	2	2	3		
Chemist..... do	1,620.00	1	1	1		
Specialist..... do	4,000.00	1	1	1		
Specialist..... do	3,500.00	1	1			
Specialist..... do	3,240.00	1	1			
Specialists..... do	3,000.00	5	2			
Specialists..... do	2,880.00	1	1	2		
Specialist (temporary)..... do	2,640.00			1		
Specialist..... do	2,520.00			1		
Specialists..... do	2,500.00	2	2	1		
Specialist (temporary)..... do	2,460.00			1		
Specialists..... do	2,400.00	5	2	1		
Specialists..... do	2,280.00	2	2	1		
Specialists..... do	2,220.00	2	2	3		
Specialist..... do	2,160.00	1	1	1		
Specialists..... do	2,100.00	1	1	4		
Specialist (temporary)..... do	2,040.00			1		
Specialists..... do	2,000.00	3		1		
Specialists..... do	1,980.00	2	2	2		
Specialists..... do	1,920.00	3	3	1		
Specialists (temporary)..... do	1,860.00			5		
Specialists..... do	1,800.00	6	1	2		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large, or to Revised Statutes, and estimated amount required for each detailed object.					Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Bureau of Animal Industry—Continued.</i>						
Employees.	Rate.	Esti- mated, 1922.	Appro- priated, 1921.	Ex- pended, 1920.		
Salaries—Continued.		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>		
Specialist.....per annum.	\$1,680.00			1		
Specialist.....do.	1,620.00	1	1	4		
Specialist (temporary).....do.	1,520.00			1		
Specialist.....do.	1,500.00			1		
Specialist (temporary).....do.	1,440.00			1		
Specialist (temporary).....do.	1,400.00			1		
Specialist.....do.	1,300.00			1		
Specialist (temporary).....do.	220.00			1		
Agent.....do.	3,000.00			1		
Agent (temporary).....do.	2,400.00			1		
Agent (temporary).....do.	1,900.00			1		
Agent.....do.	1,800.00	4	1			
Agent.....do.	1,700.00			1		
Agent.....do.	1,680.00			2		
Agent.....do.	1,620.00	6	1			
Agent (temporary).....do.	1,600.00			1		
Agent.....do.	1,580.00			1		
Agent.....do.	1,560.00	4	1			
Agent.....do.	1,520.00			1		
Agent.....do.	1,500.00			6		
Agent (temporary).....do.	1,420.00			1		
Agent.....do.	1,350.00			2		
Agent.....do.	1,320.00	1	1	5		
Agent.....do.	1,200.00			2		
Agent.....do.	1,000.00	1	1	1		
Agent, \$900 to \$120.....do.		3	3	8		
Assistant.....do.	3,000.00	1	1			
Assistant.....do.	2,280.00	1	1			
Assistant.....do.	2,120.00			1		
Assistant.....do.	1,620.00	3	3	3		
Assistant.....do.	1,440.00			1		
Assistant (part time).....do.	1,320.00			1		
Assistant.....do.	1,200.00	3				
Technologist.....do.	2,880.00	1	1			
Technologist.....do.	2,520.00			1		
Engineer.....do.	2,880.00	1	1			
Engineer.....do.	2,220.00			1		
Inspector.....do.	2,500.00	1	1			
Inspector.....do.	2,160.00			1		
Editor.....do.	2,220.00	1	1			
Editor.....do.	2,000.00			1		
Cheesemaker.....do.	2,040.00	1	1			
Cheesemaker.....do.	1,800.00			1		
Cheesemaker.....do.	1,620.00	1	1			
Herdsman.....do.	1,500.00	1	1			
Statistician.....do.	1,800.00	1	1			
Statistician.....do.	1,680.00			1		
Laboratorian.....do.	1,200.00	1	1	1		
Expert.....do.	1,000.00			3		
Expert.....per diem.	10.00			1		
Clerk.....per annum.	1,800.00			2		
Clerk.....do.	1,500.00			1		
Clerk.....do.	1,400.00		1			
Clerk.....do.	1,100.00			1		
Chauffeur.....do.	1,080.00	1	1	1		
Collaborators and charwomen, \$360 to \$120.....do.		2	2	4		
Wages:						
Carpenter.....per diem.	4.20	1	1	1		
Carpenter.....do.	4.00	1	1	1		
Mechanic.....do.	4.00	1	1			
Laborers and mechanics, \$720 to \$600.....per annum.		2	2	1		
Miscellaneous temporary labor, \$4 to \$3.....per diem.		22	19	16		
		149	103	164		
Salaries.....		\$267,660.00	\$174,000.00	\$217,845.55		
Wages.....		22,590.00	20,090.00	18,451.35		
OTHER OBJECTS OF EXPENDITURE.						
Stationery.....		1,500.00	1,000.00	863.31		
Traveling expenses.....		79,620.00	43,000.00	35,700.42		
Equipment and material.....		55,000.00	30,000.00	22,930.00		
Telephone and telegraph service.....		1,500.00	1,000.00	817.01		
Miscellaneous items.....		70,130.00	55,000.00	45,028.85		
Total.....		498,000.00	325,000.00	341,636.49		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large, or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Bureau of Animal Industry—Continued.</i>		
(62) For all necessary expenses for investigations and experiments in animal husbandry; for experiments in animal feeding and breeding, including cooperation with the State agricultural experiment stations, including repairs and additions to and erection of buildings absolutely necessary to carry on the experiments, including the employment of labor in the city of Washington and elsewhere, rent outside of the District of Columbia, and all other necessary expenses, [\$302,820] \$462,000: [Provided, That of the sum thus appropriated \$20,000 may be used for experiments in the breeding and maintenance of horses for military purposes:] Provided, [further] That of the sum thus appropriated [\$58,640] \$78,300 may be used for experiments in poultry feeding and breeding: Provided further, That of the sum thus appropriated [\$8,000 may be used for the equipment of] \$15,000 is hereby made immediately available for the erection of necessary buildings at the United States sheep experiment station in [Fremont] Clark County, Idaho, [including repairs and additions to and the erection of necessary buildings to furnish facilities for the investigation of problems pertaining to the sheep and wool industry on the farms and ranges of the Western States] (acts May 29, 1884, vol. 23, p. 31, secs. 1-11; Aug. 30, 1890, vol. 26, p. 414, secs. 1-10; Mar. 3, 1891, vol. 26, pp. 883, 1089, sec. 1; May 9, 1902, vol. 32, pp. 193-197, sec. 1; Feb. 2, 1903, vol. 32, pp. 791, 792, secs. 1-3; Mar. 3, 1905, vol. 33, p. 1264, secs. 1-6; June 29, 1906, vol. 34, p. 607, sec. 1; Mar. 4, 1913, vol. 37, p. 832, sec. 1; May 31, 1920, vol. 41, pp. 697-700, sec. 1) -----	\$462,000.00	
Appropriation for 1912..... \$47,480 Appropriation for 1913..... 47,480 Appropriation for 1914..... 52,180 Appropriation for 1915..... 182,840 Appropriation for 1916..... 189,060 Appropriation for 1917..... 218,320 Appropriation for 1918..... 262,580 Appropriation for 1919..... 308,680 Appropriation for 1920..... 327,680 Appropriation for 1921..... 302,820	Estimate for 1913..... \$47,480 Estimate for 1914..... 52,180 Estimate for 1915..... 197,840 Estimate for 1916..... 223,460 Estimate for 1917..... 208,320 Estimate for 1918..... 277,580 Estimate for 1919..... 308,680 Estimate for 1920..... 316,960 Estimate for 1921..... 519,040 Estimate for 1922..... 462,000	

NOTE.—There is an apparent increase in the above item of \$159,180, but in view of the fact that the proviso carrying \$20,000 for military horse breeding experiments (of which \$14,000 will be expended during the current fiscal year) has been eliminated and that further work on this project will be taken over by the War Department, the actual increase for animal husbandry investigations is \$173,180. It is proposed to use this additional amount as follows:

(a) \$5,000 for animal husbandry experiment farm, Beltsville, Md. This amount is necessary to meet the increased cost of operation, the purchase of implements and machinery, and the employment of additional laborers required for the care of the buildings and equipment already on hand. The experimental work at the farm is greatly hampered because of the limited funds available for these purposes.

(b) \$57,532 for beef production investigations. The beef cattle industry of the country is passing through a most serious stage of development. During the past few years producers of beef cattle have been compelled to face problems more difficult than any they have ever before experienced, and many of them have been unable to feed cattle profitably. The present indications are that the number of beef cattle fed is being reduced on account of the severe financial situation in which most producers find themselves. The production of beef cattle on the range has also been severely handicapped on account of adverse weather conditions during the past three years. The Bureau of Animal Industry is now studying beef cattle problems at Lewisburg, W. Va., Jonesboro, Ark., McNeill, Miss., and Manhattan, Kans. In addition, field men are employed studying problems in the corn belt, in cooperation with the Office of Farm Management, and on the range. It is proposed to place two additional men in the corn belt to cooperate with the Office of Farm Management in their cost of production studies, and two additional men in the range States to enter into cooperative relations with the State experiment stations in the study of production problems, and also to increase somewhat the scope of the investigations at Jonesboro, Ark., and McNeill, Miss.

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large, or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
General Expenses, Bureau of Animal Industry—Continued.		
<p>(c) \$3,000 for farm sheep investigations. Farm sheep investigations are under way at the Beltsville (Md.) farm and at the Morgan horse farm at Middlebury, Vt. The flock at Beltsville is composed almost entirely of Southdowns. The success of the department in managing this flock has been marked. The flock has been maintained at farm size, and results have been obtained showing the possibility of the intensive handling of sheep under conditions which can be followed by any farmer. It is believed desirable, however, to add other breeds of sheep suitable for farm use. A small start has been made with Shropshires, and a few Hampshires will be added this year. At least 50 ewes of each breed should be carried. Six Corriedale ewes from the sheep experiment station in Idaho have been transferred to Beltsville and will be studied to determine the value of Corriedales under farm conditions. These projects will require additional funds for their proper investigation.</p>		
<p>(d) \$45,900 for range sheep investigations. During the present calendar year such success has been obtained at the sheep experiment station in Idaho in growing feed for winter maintenance under dry land conditions that it is believed results of great value to sheep ranchmen and farmers of the West can be secured by improving the crop production at the station and making provision for the maintenance of the entire flock there during the winter. There is no doubt that, if sheep can be maintained on the range where they are raised, they will be in much better condition at the end of the winter and better able to withstand spring storms than if they are subjected to a long trip overland or by rail and the consequent change of feed. Sunflowers for silage, rye or wheat hay, sweet clover, corn, the sorghums, and other dry land crops are promising. The increased funds recommended will make possible what is regarded as a necessary development of this station, namely, that the size of the flock be brought up to 4,000 ewes at the earliest possible date, in order that four bands of ewes may be maintained and problems worked out on a commercial scale. There seems to be no question that sufficient forage can be raised for silage to meet these conditions fairly well. There is, however, some question as to the amount of hay that would have to be bought. In order that proper facilities be provided for conducting the work on an adequate basis, additional buildings will be necessary, for which \$16,250 is estimated, including—</p>		
Horse barn.....	\$3,000	
Winter headquarters.....	1,750	
Extension to lambing sheds.....	3,500	
Storage reservoir and fire mains.....	3,000	
Superintendent's residence.....	5,000	
	16,250	
Other items of expenditure will include:		
Labor.....	\$5,550	
Hay.....	20,000	
Grain.....	4,100	
	45,900	
<p>The horse barn is needed to house the work horses, as well as for the storage of hay.</p>		
<p>Winter headquarters are simple structures for housing a shepherd and providing for feed storage on the range where ewes can be handled on pleasant days during the winter.</p>		
<p>Extension of the lambing sheds is needed in order to facilitate early lambing, one of the essentials for success in range sheep management.</p>		
<p>Provision for storing surplus water as a protection against fire and possible breakdowns in the pumping plant should be made. The Government now has an investment of \$15,000 in buildings at the station, all of which are of frame construction.</p>		
<p>A superintendent's residence is needed. His present living quarters are now used also for office purposes and for housing the ranch cook who boards the laborers. The work of the ranch has grown to such an extent that an assistant superintendent is needed, and he will be assigned to the quarters now occupied by the superintendent as soon as new quarters are provided for the latter.</p>		
<p>Increases in the items for labor and feed will be needed in order to meet the requirements of the larger flock to be maintained.</p>		
<p>(e) \$5,000 for farm sheep demonstrations. Because of limited funds and the need for concentrating upon investigational projects, it has not been possible to develop the farm sheep demonstration work on an adequate basis. It is desired to place a few additional specialists in sheep husbandry in States adapted to sheep raising, to work in cooperation with the extension divisions of the agricultural colleges through county agents and other agencies whose cooperation will give an impetus to this project.</p>		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large, or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Bureau of Animal Industry—Continued.</i>		
<p>(f) \$6,338 for pork production investigations. This increase is recommended to meet the additional cost of the experimental work in pork production at Beltsville. Problems in the use of forage crops for pork production, the effect of sanitation on increased economy of production, and the use of fisheries by-products in pork production are being studied. This work has heretofore been conducted for the most part as a supplement to and at the expense of the swine husbandry extension project. In order that it may be properly financed, a special allotment should be made for this work.</p>		
<p>(g) \$16,750 for swine husbandry extension work. The funds available during the past several years for swine husbandry extension work have had to be drawn upon for the conduct of necessary experimental work in connection with pork production problems. The increase recommended will make it possible to employ about six additional specialists to cooperate with the extension divisions of the various States and extend a line of work which has fully demonstrated its practical value.</p>		
<p>(h) \$9,000 for farm horse and mule investigations. This amount is needed for conducting research work on the economy of farm power by the use of horses and mules, in cooperation with the Office of Farm Management and the Bureau of Public Roads. One of the most important problems before the farmer to-day is the determination of the economical sources of farm power. Apparently the tractor and the truck have their places in farm operations, but no permanent displacement of horses can be expected. In order to determine the proper field of these different sources of power, it is necessary to study the subject from the standpoint of the animal husbandman, the expert in farm management, and the engineer. The increase requested will make possible the employment of an animal husbandman to have charge of the project, with one assistant, and provide for the purchase of apparatus and equipment.</p>		
<p>(i) \$5,000 for Morgan horse-breeding investigations. The quality of the horses produced at the Morgan horse farm is constantly improving. Notwithstanding the increased use of automobiles, and the consequent decreased use of driving horses, there is still a place for the Morgan horse on the farms of New England, and there seems to be no doubt that it has great value for saddle purposes. Many ranches of the West are using Morgan stallions to sire cow ponies, and a number of breeders in the East are also developing their horses for saddle purposes. A covered arena or training shed is needed in order to facilitate the training of young horses at the Morgan farm under saddle. At present the public highways are used for this purpose in fair weather, but during the long winter season, much of this training work must be suspended. The purpose of the increased funds is to provide for this training shed and also to purchase needed farm machinery to replace the present equipment at the farm, which has become badly out of repair during recent years.</p>		
<p>(j) \$5,000 for farm poultry investigations. An incubator laboratory has recently been completed at the Beltsville experiment farm, but no funds are available for its equipment on account of the need for concentrating on other animal husbandry problems. The increase requested will enable the department to purchase the necessary equipment and also to inaugurate a study of incubation problems, such as losses of chicks in the shell, which run into millions of dollars annually. This is one of the most important problems in poultry production and one in the solution of which very little work has yet been done.</p>		
<p>(k) \$14,660 for poultry husbandry extension work. It has been necessary to draw upon the funds available for poultry husbandry extension work to conduct experimental work for the development of information required in connection with the extension activities. If funds are provided to carry on the work on an enlarged scale, it will be possible to extend the work to additional States which have called upon the department for assistance in poultry club organization.</p>		
<p>The language of this paragraph has been amended by omitting the proviso for breeding horses for military purposes as the work has been started by the Army authorities.</p>		
<p>The amount for buildings at the sheep experiment station in Clark County, Idaho, is made immediately available in order that the work may be begun as early as possible and to permit completion of construction before winter.</p>		
<p>The word "Clark" is inserted in lieu of "Fremont" in order to correct an error. The experiment station was in Fremont County at the time it was established. Clark County has since been created out of part of Fremont County, and the sheep experiment station is located in the new county.</p>		
<p>The matter pertaining to repairs to and erection of buildings at the station has been omitted as that phase of the work has been completed and provision is made in the immediately available clause for future construction work.</p>		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large, or to Revised Statutes, and estimated amount required for each detailed object.					Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Bureau of Animal Industry—Continued.</i>						
Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Ex-pended, 1920.		
Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>		
Chief of division.....per annum	\$4,500.00	1	1			
Chief of division.....do	4,000.00			1		
Commissoner.....do	4,250.00	1	1	1		
Husbandman.....do	3,600.00	1	1			
Husbandmen.....do	3,500.00	2	2			
Husbandman.....do	3,300.00			1		
Husbandmen.....do	2,500.00	31	4	2		
Husbandmen.....do	2,400.00	5	5	1		
Husbandman.....do	2,280.00	1	1			
Husbandman.....do	2,220.00			1		
Husbandman.....do	2,200.00			1		
Husbandman.....do	2,160.00			1		
Husbandmen.....do	2,000.00	7	5	5		
Husbandman.....do	2,040.00	1	1			
Husbandman.....do	1,920.00			1		
Husbandmen.....do	1,800.00	2	2	4		
Husbandmen.....do	1,740.00			4		
Husbandmen.....do	1,620.00	1	1	4		
Husbandmen.....do	1,500.00	3	3	5		
Husbandmen.....do	1,380.00			4		
Husbandman.....do	1,000.00			1		
Poultryman.....do	3,500.00	1	1			
Poultryman.....do	3,000.00			1		
Poultrymen.....do	2,400.00	2	2			
Poultryman.....do	1,980.00			1		
Poultryman.....do	1,920.00			1		
Poultrymen.....do	1,800.00	2	2	2		
Veterinarian (part time).....do	2,340.00	1				
Veterinarian (part time).....do	2,280.00		1			
Veterinarian (part time).....do	2,040.00			1		
Agent.....do	2,400.00	3	3	1		
Agent.....do	2,200.00	1	1	1		
Agent.....do	2,000.00	1	1	1		
Agent.....do	1,920.00	1	1	1		
Agent.....do	1,860.00	1	1			
Agent.....do	1,800.00	2	2	4		
Agent.....do	1,500.00	1	1			
Agent.....do	1,380.00	2	2	2		
Agent.....do	1,200.00	3	3	4		
Agent.....do	1,000.00			2		
Agent.....per diem	9.00	4	4	4		
Agent.....do	8.00	1	1	1		
Chemist.....per annum	2,400.00	1	1			
Photographer.....do	2,100.00	1	1	1		
Specialist.....do	2,000.00	1	1	1		
Specialist.....do	1,920.00			1		
Specialist.....per diem	10.00	1	1	1		
Specialist.....do	9.00	1	1	1		
Expert.....do	9.00	1	1	1		
Appraiser.....do	10.00	3	3	3		
Assistant.....per annum	1,740.00	1	1			
Assistant.....do	1,620.00			2		
Assistant.....do	1,500.00	3	3	3		
Assistant.....do	1,440.00			1		
Assistant.....do	1,400.00	1	1			
Assistant.....do	1,380.00			2		
Assistant.....do	1,200.00			1		
Groom.....do	1,680.00	1	1			
Groom.....do	1,380.00			1		
Foremen.....do	1,200.00	2	1			
Collaborator.....per diem	9.00	1	1	1		
Clerk.....per annum	1,200.00			1		
Clerk.....do	1,100.00			1		
Teauster.....do	1,200.00	1	1	1		
Chauffeur.....do	1,080.00	1	1	1		
Agents and foremen, \$900 to \$600.....do		1	2	2		
Wages:						
Laborers.....do	1,500.00	2	1	2		
Laborers.....do	1,200.00	4	4	5		
Laborer.....do	1,000.00	1	1	1		
Miscellaneous temporary labor—						
\$900 to \$540.....do		21	18	12		
\$70 to \$9.....per month		3	3	3		
\$3 to \$2.75.....per diem		14	14	8		
		148	115	121		
Salaries.....		\$197,450.00	\$133,070.00	\$149,773.66		
Wages.....		27,000.00	20,000.00	27,519.55		
OTHER OBJECTS OF EXPENDITURE.						
Traveling expenses.....		49,240.00	30,820.00	30,215.61		
Equipment and material.....		35,000.00	25,000.00	23,887.08		
Telephone and telegraph service.....		1,500.00	1,500.00	1,211.05		
Miscellaneous items.....		151,810.00	92,430.00	95,073.05		
Total.....		462,000.00	302,820.00	327,680.00		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large, or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.	
<i>General Expenses, Bureau of Animal Industry—Continued.</i>			
(63) For all necessary expenses for scientific investigations in diseases of animals, including the maintenance and improvement of the bureau experiment station at Bethesda, Md., and the necessary alterations of buildings thereon, and the necessary expenses for investigations of tuberculin, serums, antitoxins, and analogous products, [\$106,400] \$147,770: <i>Provided</i> , That of said sum \$40,000 may be used for researches concerning the cause, modes of spread, and methods of treatment and prevention of the disease of contagious abortion of animals (<i>acts May 29, 1884, vol. 23, p. 31, secs. 1-11; Aug. 30, 1890, vol. 26, p. 414, secs. 1-10; Mar. 3, 1891, vol. 26, pp. 883, 1089, sec. 1; May 9, 1902, vol. 32, pp. 193-197, sec. 1; Feb. 2, 1903, vol. 32, pp. 791, 792, secs. 1-3; Mar. 3, 1905, vol. 33, p. 1264, secs. 1-6; June 29, 1906, vol. 34, p. 607, sec. 1; Mar. 4, 1913, vol. 37, p. 832, sec. 1; May 31, 1920, vol. 41, pp. 697-700, sec. 1</i>) \$147,770. 00			
Appropriation for 1912.....	\$78,680	Estimate for 1913.....	\$78,680
Appropriation for 1913.....	78,680	Estimate for 1914.....	78,680
Appropriation for 1914.....	78,680	Estimate for 1915.....	77,360
Appropriation for 1915.....	77,360	Estimate for 1916.....	103,580
Appropriation for 1916.....	85,940	Estimate for 1917.....	88,020
Appropriation for 1917.....	138,020	Estimate for 1918.....	134,600
Appropriation for 1918.....	134,600	Estimate for 1919.....	132,560
Appropriation for 1919.....	124,560	Estimate for 1920.....	124,560
Appropriation for 1920.....	124,560	Estimate for 1921.....	141,450
Appropriation for 1921.....	106,400	Estimate for 1922.....	147,770
NOTE.—There is an increase in this item of \$41,370. which it is proposed to use as follows:			
(a) \$12,500 for investigations of internal parasites of hogs. In view of the results of recent investigations showing that large numbers of young pigs are killed and possibly even larger numbers stunted in growth by the attacks of internal parasites, this subject has assumed such great importance that the extension of the department's investigation work is highly desirable. It is important that the problems be studied in several localities in addition to the one where present investigations are in progress. In some parts of the country the swine industry is at a standstill or actually losing ground because of losses from parasites, and complaints of such losses are becoming increasingly more numerous.			
(b) \$25,000 for investigations of parasites of southern live stock. It is a well-established fact that a highly prosperous live-stock industry can not exist under the climatic conditions that obtain in many of the Southern States unless the parasitic diseases that affect live stock are eradicated or controlled. Present knowledge of these diseases is too meager to make effective control possible, and the only way that such information can be obtained is through scientific research by properly qualified specialists. Repeated requests have been received by the department for assistance along these lines. Steps should be taken immediately to meet this emergency, which is becoming more and more serious with the increasing efforts being put forth to build up the live-stock industry of the South. A much larger sum than that requested could be used to advantage if the work were already well organized and qualified men to carry it on were not so difficult to obtain. The amount recommended, however, will enable the department to establish the work and to carry it on effectively during the first year.			
(c) \$3,870 for miscellaneous pathological investigations. This small increase is desired in order to enlarge somewhat the projects for the investigation of glanders, forage poisoning, anthrax, and miscellaneous biological investigations.			

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large, or to Revised Statutes, and estimated amount required for each detailed object.					Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Bureau of Animal Industry—Continued.</i>						
Employees.	Rate.	Esti- mated, 1922.	Appro- priated, 1921.	Ex- pended, 1920.		
Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>		
Chief of division.....per annum..	\$4,250.00	1	1	1		
Chief of division.....do.....	3,750.00	1	1	1		
Chief of division.....do.....	3,500.00	1	1	1		
Chief of division.....do.....	3,000.00	1	1	1		
Superintendent.....do.....	4,000.00	1	1	1		
Superintendent.....do.....	3,500.00	1	1	1		
Superintendent.....do.....	3,240.00	1	1	1		
Superintendent.....do.....	2,760.00	1	1	1		
Zoologist.....do.....	3,600.00	1	1	1		
Zoologist.....do.....	3,000.00	1	1	1		
Zoologist.....do.....	2,500.00	1	1	1		
Zoologist.....do.....	2,340.00	1	1	1		
Zoologist.....do.....	2,040.00	3	1	1		
Zoologist.....do.....	1,740.00	1	1	1		
Zoologist.....do.....	1,500.00	1	1	2		
Physiologist.....do.....	3,000.00	1	1	1		
Physiologist.....do.....	2,880.00	1	1	1		
Physiologist.....do.....	2,820.00	1	1	1		
Physiologist.....do.....	2,280.00	5	1	1		
Physiologist.....do.....	2,100.00	1	1	1		
Physiologist.....do.....	2,040.00	5	1	1		
Inspector.....do.....	3,000.00	1	1	1		
Inspector.....do.....	2,500.00	1	1	1		
Inspector.....do.....	2,400.00	1	1	1		
Inspector.....do.....	2,340.00	1	1	1		
Inspector.....do.....	1,980.00	1	1	1		
Inspector.....do.....	1,920.00	1	1	1		
Inspector.....do.....	1,800.00	1	1	1		
Inspector.....do.....	1,740.00	1	1	1		
Inspector.....do.....	1,320.00	2	2	1		
Bacteriologist.....do.....	2,880.00	1	1	1		
Bacteriologist.....do.....	2,580.00	1	1	1		
Bacteriologist.....do.....	2,500.00	1	1	1		
Pathologist.....do.....	2,820.00	1	1	1		
Chemist.....do.....	2,160.00	1	1	1		
Chemist.....do.....	1,980.00	1	1	1		
Assistant (temporary).....do.....	1,560.00	1	1	1		
Assistant (temporary).....do.....	1,440.00	1	1	1		
Laboratory helper.....do.....	1,200.00	1	1	1		
Laboratory helper, agent, cook and collaborator, \$900 to \$1.....do.....		3	3	5		
Clerk.....do.....	1,100.00	1	1	2		
Wages:						
Laborer.....do.....	1,200.00	1	1	1		
Carpenter.....do.....	1,000.00	1	1	1		
Miscellaneous temporary labor—						
\$75.....per month.....		1	1	2		
\$4.50 to \$2.....per diem.....		1	1	25		
		40	28	57		
Salaries.....		\$83,740.00	\$58,000.00	\$61,830.10		
Wages.....		2,000.00	2,000.00	7,600.00		
OTHER OBJECTS OF EXPENDITURE.						
Stationery.....		500.00	300.00	214.07		
Traveling expenses.....		12,000.00	7,000.00	6,551.34		
Equipment and material.....		15,000.00	10,000.00	9,308.00		
Telephone and telegraph service.....		300.00	225.00	193.91		
Miscellaneous items.....		34,230.00	28,875.00	35,800.20		
Total.....		147,770.00	106,400.00	121,497.62		

- (74) For investigating the disease of hog cholera, and for its control or eradication by such means as may be necessary, including demonstrations, the formation of organizations, and other methods, either independently or in cooperation with farmers' associations, State or county authorities, **[\$410,000]** \$678,925: *Provided*, That of said sum **[\$188,280]** \$202,540 shall be available for expenditure in carrying out the provisions of the act approved Mar. 4, 1913, regulating the preparation, sale, barter, exchange, or shipment of any virus, serum, toxin, or analogous product manufactured in the United States and the importation of such products intended for use in the treatment of domestic animals: *And provided further*, That of said sum \$29,520 shall be available for researches concerning the cause, modes of spread, and methods of treatment and prevention of this disease (*acts May 29, 1884, vol. 23, p. 31, secs. 1-11; Aug. 30, 1890, vol. 26, p. 414, secs. 1-10; Mar. 3, 1891, vol. 26, pp. 883, 1089, sec. 1; May 9, 1902, vol. 32, pp. 193-197, sec. 1; Feb. 2, 1903, vol. 32, pp. 791-792, secs. 1-3; Mar. 3, 1905, vol. 33, p. 1264, secs. 1-6; June 29, 1906, vol. 34, p. 607, sec. 1; Mar. 4, 1913, vol. 37, p. 832, sec. 1; May 31, 1920, vol. 41, pp. 697-700, sec. 1*) \$678,925.00

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large, or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
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General Expenses, Bureau of Animal Industry—Continued.

Appropriation for 1916.....	\$235,000	Estimate for 1917.....	\$185,000
Appropriation for 1917.....	360,000	Estimate for 1918.....	413,100
Appropriation for 1918.....	413,100	Estimate for 1919.....	446,900
Appropriation for 1919.....	446,900	Estimate for 1920.....	438,080
Appropriation for 1920.....	641,045	Estimate for 1921.....	658,945
Appropriation for 1921.....	410,000	Estimate for 1922.....	678,925

NOTE.—An increase of \$268,925 is recommended in this item, to be expended as follows:

(a) \$254,665 for hog-cholera eradication. At the last session, Congress reduced the appropriation for this work by approximately \$250,000. As a result the department has been seriously hampered in effectively controlling hog cholera, the field force engaged in hog-cholera eradication work during the current fiscal year has been reduced from 140 veterinarians to 54, and many sections of the States concerned have been deprived of Federal cooperation. Assistance heretofore offered to swine growers and others in the application of recognized methods for the prevention and control of the disease has had to be so limited in scope as to leave the swine industry exposed to serious danger. Reduced appropriation has also made it necessary for the department to withdraw its specialists engaged in educational work from California, Florida, Georgia, Maryland, New Mexico, New York, Ohio, Oklahoma, South Dakota, and West Virginia, thus depriving those States of assistance that has been of immense benefit in disseminating information concerning hog cholera and the best methods of preventing the disease. In order to restore the work to its former status and provide adequate cooperation to the States in the protection of the great swine industry, the increase is urged. Without doubt this work since its beginning has more than justified the expenditures of Government funds. It is only necessary to point out that hog-cholera losses have been reduced from 144 per thousand animals to 38 per thousand, which, considering the enormous number of hogs in the United States, obviously represents an immense saving. The reduced appropriations for the current fiscal year, resulting in such a radical curtailment of activities, has caused a flood of complaints and protests from farmers' organizations, chambers of commerce, veterinary associations, and individual farmers and hog raisers in all parts of the hog-producing sections of the country.

(b) \$14,260 for the enforcement of the virus-serum-toxin act. During the past year 18 new plants were granted licenses to manufacture viruses, serums, and analogous products, while 9 ceased production during the same period, a net gain of 9 plants. The 9 additional establishments are in most cases so located that it is impossible to utilize the services of employees assigned to other plants for their supervision. To cover the new work properly, 13 additional veterinary inspectors, 23 lay inspectors, and 4 clerks will be needed. There is also need for a greater amount of laboratory tests and investigational work to determine the suitability of biologic products for marketing under license. The work already done in this direction has had a marked effect on the character and quality of the products now produced under license, but to insure proper protection of the live-stock industry additional work should be done. During the past two years there has been an enormous increase in the production of anti hog-cholera serum, hog-cholera virus, and other products, but the fund for the supervision and control of these products has not been correspondingly increased.

Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.
Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>
Chief of division.....per annum..	\$4,500.00	2	2	1
Chief of division.....do.....	3,500.00			1
Chief of division.....do.....	3,000.00	1	1	
Inspector in charge.....do.....	2,264.00			1
Inspector.....do.....	3,360.00	1	1	
Inspector.....do.....	3,240.00			1
Inspector.....do.....	3,000.00	2	2	
Inspector.....do.....	2,880.00	1	1	
Inspector.....do.....	2,760.00	1	1	
Inspector.....do.....	2,500.00	12	12	1
Inspector.....do.....	2,460.00			1
Inspector.....do.....	2,400.00	7	7	4
Inspector.....do.....	2,340.00	1	1	2
Inspector.....do.....	2,280.00	1	1	7
Inspector.....do.....	2,220.00	5	5	3
Inspector.....do.....	2,160.00	5	5	3
Inspector.....do.....	2,100.00	21	21	1
Inspector.....do.....	2,040.00	7	7	5
Inspector.....do.....	2,000.00	75	2	4
Inspector.....do.....	1,980.00	1	1	6
Inspector.....do.....	1,920.00	19	19	28
Inspector.....do.....	1,860.00			1
Inspector.....do.....	1,800.00	18	14	36
Inspector.....do.....	1,760.00			1
Inspector.....do.....	1,740.00			4
Inspector.....do.....	1,720.00			1

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large, or to Revised Statutes, and estimated amount required for each detailed object.					Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Bureau of Animal Industry—Continued.</i>						
Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.		
Salaries—Continued.		Number.	Number.	Number.		
Inspector..... per annum.....	\$1,700.00			2		
Inspector..... do.....	1,680.00	2	2			
Inspector..... do.....	1,620.00			70		
Inspector..... do.....	1,600.00			1		
Inspector..... do.....	1,500.00	2	2	13		
Inspector..... do.....	1,380.00	23	23			
Inspector..... do.....	1,320.00	10		1		
Inspector..... do.....	1,250.00	2	2	2		
Inspector..... do.....	1,200.00			24		
Inspector..... do.....	1,080.00			5		
Bacteriologist..... do.....	3,000.00	1	1			
Bacteriologist..... do.....	2,880.00			1		
Biochemist..... do.....	2,460.00	1	1			
Biochemist..... do.....	2,340.00			1		
Assistant (temporary)..... do.....	1,400.00			1		
Clerk (temporary)..... do.....	1,400.00			1		
Clerks (temporary)..... do.....	1,200.00			2		
Clerk (temporary)..... do.....	1,100.00			1		
Clerks (temporary)..... do.....	1,000.00			2		
Wages:						
Laborer..... do.....	1,050.00	1	1	1		
Laborer..... do.....	990.00			1		
Miscellaneous temporary labor.. per diem..	3.00			1		
		222	135	242		
Salaries.....		\$438,840.00	\$272,440.00	\$397,166.47		
Wages.....		1,050.00	1,050.00	2,940.00		
OTHER OBJECTS OF EXPENDITURE.						
Traveling expenses.....		181,250.00	100,000.00	133,138.47		
Equipment and material.....		33,000.00	20,000.00	17,289.19		
Telephone and telegraph service.....		1,500.00	1,500.00	1,354.97		
Miscellaneous items.....		23,285.00	15,010.00	14,726.18		
Total.....		678,925.00	410,000.00	566,615.28		

- (65) For all necessary expenses for the investigation, treatment, and eradication of dourine [\$65,200] (acts May 29, 1884, vol. 23, p. 31, secs. 1-11; Aug. 30, 1890, vol. 26, p. 414, secs. 1-10; Mar. 3, 1891, vol. 26, pp. 883, 1089, sec. 1; May 9, 1902, vol. 32, pp. 193-197, sec. 1; Feb. 2, 1903, vol. 32, pp. 791, 792, secs. 1-3; Mar. 3, 1905, vol. 33, p. 1264, secs. 1-6; June 29, 1906, vol. 34, p. 607, sec. 1; Mar. 4, 1913, vol. 37, p. 832, sec. 1; May 31, 1920, vol. 41, pp. 697-700, sec. 1) .. \$63,800.00

Appropriation for 1918..... \$99,000 Estimate for 1919..... \$97,800
 Appropriation for 1919..... 97,800 Estimate for 1920..... 88,800
 Appropriation for 1920..... 88,800 Estimate for 1921..... 85,200
 Appropriation for 1921..... 65,200 Estimate for 1922..... 63,800

NOTE.—There is a decrease in this item of \$1,400, due to the transfer to the statutory roll of 1 clerk, class 2.

Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.
Salaries:		Number.	Number.	Number.
Inspector..... per annum.....	\$3,000.00	1	1	2
Inspector..... do.....	2,500.00	1	1	3
Inspector..... do.....	2,340.00			1
Inspector..... do.....	2,100.00	1	1	2
Inspector..... do.....	2,040.00	2	2	1
Inspector..... do.....	1,920.00	5	5	2
Inspector..... do.....	1,860.00	1	1	1
Inspector..... do.....	1,800.00	2	2	
Inspector..... do.....	1,740.00			2
Inspector..... do.....	1,720.00			1
Inspector..... do.....	1,700.00			1
Inspector..... do.....	1,680.00	2	2	
Inspector..... do.....	1,620.00	2	2	10
Inspector..... do.....	1,500.00			3
Agent..... do.....	1,500.00	1	1	
Agent..... do.....	1,440.00			1
Agent..... per month.....	100.00			1
Physiologist..... per annum.....	2,580.00			1
Bacteriologist..... do.....	2,580.00			1
Bacteriologist..... do.....	2,520.00			1
Laboratory helper..... do.....	1,200.00			1
Clerk..... do.....	1,200.00			1
Engincer..... do.....	1,200.00			1
Wages:				
Miscellaneous temporary labor.. per diem..	3.00	2	2	2
		20	20	36
Salaries.....		\$34,840.00	\$34,840.00	\$44,285.97
Wages.....		1,500.00	1,500.00	1,500.75

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large, or to Revised Statutes, and estimated amount required for each detailed object.					Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Bureau of Animal Industry—Continued.</i>						
Employees.		Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.	
OTHER OBJECTS OF EXPENDITURE.						
Traveling expenses.....			\$18,600.00	\$20,000.00	\$22,019.71	
Equipment and material.....			2,500.00	2,500.00	2,350.93	
Miscellaneous items.....			6,360.00	6,360.00	5,161.48	
Total.....			63,800.00	65,200.00	75,318.84	
(66) For construction of buildings at bureau experiment farm at Beltsville, Md. (submitted).....					\$30,000.00	
NOTE.—An item for building construction at the Beltsville farm of the Bureau of Animal Industry was carried in the agricultural appropriation acts for a number of years prior to the fiscal year 1919. For the past three years, however, no appropriation has been made for buildings at this farm. On account of the growth of the investigational work of the Bureau of Animal Industry, the following additional structures are absolutely essential to its effective prosecution:						
1 bull barn, one-story, concrete.....			\$1,050			
1 test barn addition, one-story, concrete.....			3,000			
1 boiler house, one-story, concrete, with 60-foot chimney.....			5,000			
2 silos, concrete, at \$1,000 each.....			2,000			
1 wagon shed, one-story, concrete.....			2,400			
1 experimental barn, two-story, concrete.....			14,550			
1 east wing extension, one-story, frame.....			2,000			
			30,000			
Objects of expenditure.		Estimated, 1922.	Appropriated, 1921.	Expended, 1920.		
Construction work.....		\$30,000.00				
This construction work will consist of the following buildings:						
Bull barn, one-story, concrete, 22 by 76 feet, containing approximately 15,000 cubic feet, at 7 cents, estimated cost.....			\$1,050.00			
Test barn addition, one-story, concrete, 32 by 52 feet, containing approximately 20,000 cubic feet, at 15 cents, estimated cost.....			3,000.00			
Boiler house, one-story, concrete, containing approximately 30,000 cubic feet, at 12 cents, estimated cost \$3,600; and a 60-foot chimney, \$1,400; total cost.....			5,000.00			
Silos, two, concrete, 14 feet diameter by 40 feet high, at an estimated cost of \$1,000 each.....			2,000.00			
Wagon shed, one-story, concrete, 24 by 102 feet, containing approximately 40,000 cubic feet, at 6 cents, estimated cost.....			2,400.00			
Experimental barn, two-story, concrete, feed barn, with one-story wings, containing approximately 100,000 cubic feet, at 15 cents per cubic foot, estimated cost.....			14,550.00			
East wing extension, one-story, frame, 36 by 47 feet, containing approximately 25,400 cubic feet, at 8 cents, estimated cost.....			2,000.00			
(67) For general administrative work, including traveling expenses and salaries of employees engaged in such work, rent outside of the District of Columbia, office fixtures and supplies, express, freight, telegraph, telephone, and other necessary expenses, including supervision of the campaign for "Better Sires—Better Stock" [\$26,686] (acts May 29, 1884, vol. 23, p. 31, secs. 1-11; Aug. 30, 1890, vol. 26, p. 414, secs. 1-10; Mar. 3, 1891, vol. 26, pp. 883, 1089, sec. 1; May 9, 1902, vol. 32, pp. 193-197, sec. 1; Feb. 2, 1903, vol. 32, pp. 791, 792, secs. 1-3; Mar. 3, 1905, vol. 33, p. 1264, secs. 1-6; June 29, 1906, vol. 34, p. 607, sec. 1; Mar. 4, 1913, vol. 37, p. 832, sec. 1; May 31, 1920, vol. 41, pp. 697-700, sec. 1).....					41,686.00	

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
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General Expenses, Bureau of Animal Industry—Continued.

Appropriation for 1912.....	\$46,940	Estimate for 1913.....	\$42,606
Appropriation for 1913.....	42,606	Estimate for 1914.....	40,186
Appropriation for 1914.....	40,186	Estimate for 1915.....	39,286
Appropriation for 1915.....	39,286	Estimate for 1916.....	39,286
Appropriation for 1916.....	39,286	Estimate for 1917.....	30,186
Appropriation for 1917.....	30,186	Estimate for 1918.....	26,686
Appropriation for 1918.....	26,686	Estimate for 1919.....	26,686
Appropriation for 1919.....	26,686	Estimate for 1920.....	26,686
Appropriation for 1920.....	26,686	Estimate for 1921.....	26,686
Appropriation for 1921.....	26,686	Estimate for 1922.....	41,686

NOTE.—It is proposed to add at the end of this paragraph the words “including supervision of the campaign for ‘Better Sires—Better Stock,’” and to increase the item by \$15,000 in order to carry out this work.

In many classes of live stock the value of pure-bred sires of good type has become so evident that a special effort was undertaken, beginning October 1, 1919, to place the facts before the public and to increase the use of pure-bred sires. Thus far the work has consisted chiefly of presenting a plan, by means of posters, circulars, and bulletins, for improving live stock in a systematic way under the slogan “Better Sires—Better Stock.” This campaign has involved considerable correspondence and some record work, but thus far it has been handled as an adjunct to other work and by drawing on funds allotted to related activities. The campaign is very useful in reinforcing the work of the county agents, and there is a constant demand for more facts, figures, illustrations, exhibits, and other material showing the value of pure-bred sires of good quality. The support of the movement has been almost unanimous, including the approval not only of agricultural extension workers but also of the farm press, bankers, officers of live-stock associations, and others. Newspapers in rural districts have used space generously in discussing the work and supporting it editorially. Better live stock, of course, means a more economical use of feed, labor, housing, and other cost factors, and will enable stockmen to produce meats and dairy and poultry products with greater efficiency. In dairying, better breeding means greater average milk production and, in poultry raising, more eggs per hen. Briefly, this campaign is intended to improve the quality of live stock and reduce costs of production by showing farmers how to utilize more fully the laws of heredity.

Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.
Salaries:		Number.	Number.	Number.
Assistant chief of bureau (part time).....		1	1	1
..... per annum.....	\$4,500.00	1	1	1
Assistant chief of bureau (part time).do....	3,000.00	2	2	2
Assistant chief of bureau (part time).do....	2,500.00	1	1	1
Chief miscellaneous division.....do.....	2,500.00	1	1	1
Inspector (part time).....do.....	2,340.00	1	1	1
Clerk (part time).....do.....	1,800.00	1	1	1
Clerk (part time).....do.....	1,500.00	1	1	1
Clerk (part time).....do.....	1,400.00	2	2	.....
Clerk (part time).....do.....	1,200.00	2	2	.....
Messenger boy (part time).....do.....	480.00	1	1	1
		13	13	9
Salaries.....		\$10,000.00	\$10,000.00	\$8,338.01
OTHER OBJECTS OF EXPENDITURE.				
Stationery.....		1,500.00	1,500.00	1,053.37
Traveling expenses.....		5,000.00	5,000.00	4,187.19
Equipment and material.....		6,000.00	6,000.00	5,600.59
Telephone and telegraph service.....		2,000.00	2,000.00	1,822.13
Miscellaneous items.....		17,186.00	2,186.00	1,696.11
Total.....		41,686.00	26,686.00	22,697.40

In all, for general expenses\$5,207,881.00 \$3,917,346.00

Appropriations for 1912.....	\$1,257,300	Estimates for 1913.....	\$1,229,666
Appropriations for 1913.....	1,217,866	Estimates for 1914.....	1,366,546
Appropriations for 1914.....	1,371,946	Estimates for 1915.....	1,727,996
Appropriations for 1915.....	1,597,996	Estimates for 1916.....	1,637,746
Appropriations for 1916.....	1,856,706	Estimates for 1917.....	2,072,776
Appropriations for 1917.....	2,277,776	Estimates for 1918.....	2,588,336
Appropriations for 1918.....	2,613,336	Estimates for 1919.....	2,680,986
Appropriations for 1919.....	3,122,678	Estimates for 1920.....	3,076,238
Appropriations for 1920.....	4,326,121	Estimates for 1921.....	4,591,381
Appropriations for 1921.....	3,917,346	Estimates for 1922.....	5,207,881

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>Meat Inspection, Bureau of Animal Industry—</i>		
(68) For additional expenses in carrying out the provisions of the meat-inspection act of June 30, 1906 (Thirty-fourth Statutes at Large, page 674), as amended by the act of March 4, 1907 (Thirty-fourth Statutes at Large, page 1256), and as extended to equine meat by the act of July 24, 1919 (Forty-first Statutes at Large, page 241), including the purchase of tags, labels, stamps, and certificates printed in course of manufacture [\$892,580] , \$1,200,200 (<i>acts June 30, 1906, vol. 34, p. 674, sec. 1; May 31, 1920, vol. 41, p. 700, sec. 1</i>)	\$1, 200, 200. 00	\$892, 580. 00

Appropriation for 1914.....	\$200,000	Estimate for 1915.....	\$300,000
Appropriation for 1915.....	375,000	Estimate for 1916.....	375,000
Appropriation for 1916.....	375,000	Estimate for 1917.....	344,500
Appropriation for 1917.....	344,500	Estimate for 1918.....	575,300
Appropriation for 1918.....	501,620	Estimate for 1919.....	477,200
Appropriation for 1919.....	477,200	Estimate for 1920.....	449,480
Appropriation for 1920.....	903,960	Estimate for 1921.....	868,280
Appropriation for 1921.....	892,580	Estimate for 1922.....	1,200,200

NOTE.—There is an apparent increase in this item of \$307,620, but taking into consideration the transfer to the statutory roll of 1 clerk, class 2, the actual increase is \$309,020.

The meat-inspection service is an extensive work which has a steady growth. There are now some 2,500 employees stationed at approximately 150 cities throughout the United States. During the past year more than 85,000,000 animals and nearly 8,000,000,000 pounds of meat and meat products were inspected. It is proposed to add 50 veterinary inspectors and 150 lay inspectors to the force, promote some 56 employees at the rate of \$180 each, provide for increased cost of supplies, telephone charges, office rents, freight charges at permanent stations, higher rates for railroad fares and subsistence of traveling inspectors and employees transferred from station to station, and other items of expenditure essential for the proper conduct of the meat-inspection work.

Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.
<i>Salaries:</i>		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>
Chief of division... per annum...	\$4,500.00	1	1	
Chief of division... do...	4,000.00			1
Inspector (temporary)... do...	4,080.00			1
Inspector... do...	3,780.00	3	3	
Inspector... do...	3,540.00	1	1	1
Inspector... do...	3,480.00	3	3	
Inspector... do...	3,240.00	3	3	3
Inspector... do...	3,180.00	1	1	
Inspector... do...	3,160.00	1	1	
Inspector... do...	3,120.00	2	2	
Inspector... do...	3,000.00	13	11	7
Inspector... do...	2,880.00	13	13	
Inspector... do...	2,640.00			3
Inspector... do...	2,620.00			6
Inspector... do...	2,580.00			6
Inspector... do...	2,520.00			11
Inspector... do...	2,500.00	24	24	
Inspector... do...	2,460.00	3	3	2
Inspector... do...	2,400.00	20	20	5
Inspector... do...	2,370.00			3
Inspector... do...	2,340.00	38	38	21
Inspector... do...	2,280.00	15	15	6
Inspector... do...	2,220.00	20	20	21
Inspector... do...	2,160.00	14	14	8
Inspector... do...	2,120.00			13
Inspector... do...	2,100.00	209	153	36
Inspector... do...	2,040.00	38	38	22
Inspector... do...	2,020.00	1	1	7
Inspector... do...	2,016.00			1
Inspector... do...	2,000.00			1
Inspector... do...	1,980.00	26	26	6
Inspector... do...	1,920.00	56	112	168
Inspector... do...	1,900.00			1
Inspector... do...	1,860.00	5	5	25
Inspector... do...	1,800.00	98	98	5
Inspector... do...	1,776.00	1	1	
Inspector... do...	1,740.00	10	10	72
Inspector... do...	1,720.00	3	3	35
Inspector... do...	1,700.00	1	1	2
Inspector... do...	1,680.00	103	103	24
Inspector... do...	1,660.00	1	1	
Inspector... do...	1,620.00	23	23	257
Inspector... do...	1,596.00			1
Inspector... do...	1,560.00	1	1	2
Inspector... do...	1,500.00	846	788	143
Inspector... do...	1,440.00	19	19	22
Inspector... do...	1,414.00	1	1	
Inspector... do...	1,380.00	79	79	5
Inspector... do...	1,320.00	480	480	882
Inspector... do...	1,296.00			1

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.					Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>Meat Inspection, Bureau of Animal Industry—Continued.</i>						
Employees.	Rate.	Estimated, 1922.	Appropriated, 1911.	Expended, 1920.		
Salaries—Continued.		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>		
Inspector.....per annum..	\$1,260.00	72	72	82		
Inspector.....do.....	1,220.00	1	1	2		
Inspector.....do.....	1,200.00	33	33	551		
Inspector.....do.....	1,140.00	1	1			
Inspector.....do.....	1,120.00	3	3	9		
Inspector.....do.....	1,080.00	215	55	90		
Inspector.....do.....	1,020.00			1		
Inspector.....do.....	1,000.00	1	1			
Editor.....do.....	3,000.00	1	1	1		
Assistant.....do.....	3,000.00	1	1			
Assistant.....do.....	2,500.00	2	2			
Expert.....do.....	2,500.00	1	1			
Expert.....do.....	2,340.00			1		
Biochemist.....do.....	3,000.00	1	1			
Biochemist.....do.....	2,520.00			1		
Biochemist.....do.....	2,460.00	1	1			
Biochemist.....do.....	2,160.00			1		
Bacteriologist.....do.....	2,340.00			1		
Photographer.....do.....	1,800.00	1	1			
Chemist.....do.....	1,520.00			1		
Chemist.....do.....	1,320.00	1	1			
Microscopist.....do.....	1,020.00			1		
Laboratory helper.....do.....	1,200.00	1	1	1		
Laboratory helper.....do.....	1,000.00			1		
Clerk.....do.....	1,800.00			1		
Clerk.....do.....	1,400.00			1		
Clerk.....do.....	1,200.00			16		
Clerk.....do.....	1,100.00			1		
Clerk.....do.....	1,000.00			2		
Fireman.....do.....	1,080.00			1		
Laboratory helper and charwomen, \$180- \$240.....do.....		3	3	1		
Wages:						
Laborers (temporary), \$900-\$180.....do.....		3	3	4		
		2,515	2,295	2,607		
Salaries.....		\$3,981,190.00	\$3,705,670.00	\$3,622,353.02		
Wages.....		2,640.00	2,640.00	3,101.50		
OTHER OBJECTS OF EXPENDITURE.						
Stationery.....		2,000.00	1,500.00	1,212.86		
Traveling expenses.....		70,000.00	60,000.00	47,225.18		
Equipment and material.....		85,000.00	60,000.00	50,909.33		
Telephone and telegraph service.....		6,000.00	6,000.00	5,302.42		
Miscellaneous items.....		53,370.00	56,770.00	47,557.80		
Total.....		4,200,200.00	3,892,580.00	3,777,662.11		
<i>Statement of clerks employed in District of Columbia under lump-fund appropriations for 30 days or more during the fiscal year ended June 30, 1920 (32 Stat., p. 303).</i>						
GENERAL EXPENSES, BUREAU OF ANIMAL INDUSTRY.						
2 clerks, at \$1,500 each per annum.						
23 clerks, at \$1,200 each per annum.						
1 clerk, \$1,080 per annum.						
3 clerks, at \$1,400 each per annum.						
9 clerks, at \$1,100 each per annum.						
1 clerk, \$1,000 per annum.						
MEAT INSPECTION.						
1 clerk, \$1,500 per annum.						
1 clerk, \$1,380 per annum.						
23 clerks, at \$1,200 each per annum.						
4 clerks, at \$1,400 each per annum.						
1 clerk, \$1,260 per annum.						
Total for Bureau of Animal Industry.....					\$7,074,931.00	\$5,477,156.00

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
BUREAU OF PLANT INDUSTRY.		
<i>Salaries, Bureau of Plant Industry—</i>		
(1) One physiologist and pathologist, who shall be chief of bureau (increase of \$2,500) (<i>R. S., p. 87, secs. 520-523; acts Apr. 23, 1904, vol. 33, p. 281, sec. 1; May 31, 1920, vol. 41, pp. 700, 701, sec. 1</i>) -----	\$7, 500. 00	
NOTE.—An increase of \$2,500 in the salary of the chief of bureau is recommended. See note under item 1, page 19.		
(2) One assistant to the chief (increase of \$500) (<i>same acts</i>) -----	3, 500. 00	
NOTE.—This officer has general supervision of the clerical service of the bureau, purchase of supplies and equipment, operation and maintenance of central file room and property room, and all matters pertaining to pay rolls, leaves of absence, appointments, and other changes in personnel. In the past few years he has also taken over a considerable amount of the administrative work formerly performed by the chief and associate chief of bureau, and serves as acting chief in their absence. The present incumbent has been in the department 27 years and has had no promotion for 6 years. He is one of the most experienced men in the public service, whose advice is often sought by other departments of the Government. The importance and amount of the service rendered necessitate this increase.		
(3) One executive assistant in seed distribution (<i>same acts</i>) -----	2, 500. 00	
(4) One officer in charge of publications (increase of \$250) (<i>same acts</i>) -----	2, 500. 00	
NOTE.—This officer has charge of the editing and preparation for the printer of the manuscripts and proofs of the bulletins and other publications of the bureau. This work requires a technical knowledge of plant industry subjects and involves responsible supervisory duties. The present incumbent has been in the bureau 18 years, and has had no promotion for 7 years. The salary now received is not commensurate with that paid for similar work in other bureaus, and the increase recommended is fully justified.		
(5) [One landscape gardener, \$1,800.]		
NOTE.—The title of the above place has been changed to 1 foreman of gardeners, as the latter designation more accurately describes the duties of the position, which are of a supervisory character. (See item 6.)		
(6) One foreman of gardeners (<i>submitted</i>) -----	1, 800. 00	
NOTE.—See note under item 5.		
(7) One officer in charge of records (increase of \$250) (<i>R. S., p. 87, secs. 520-523; acts Apr. 23, 1904, vol. 33, p. 281, sec. 1; May 31, 1920, vol. 41, pp. 700, 701, sec. 1</i>) -----	2, 500. 00	
NOTE.—This officer has charge of the accounting work of the bureau, which involves very responsible supervisory duties. He has served in the department 15 years, without promotion during the past 6 years, although there has been a general advance in salaries paid to accounting officers in other departments and bureaus and in commercial employment. It is hoped that the small increase recommended will be granted.		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>Salaries, Bureau of Plant Industry—Continued.</i>		
(8) Four executive clerks, at \$2,400 each (<i>submitted</i>) -----	\$9,600.00	
<p>NOTE.—These new places and those in items 15 and 16 are recommended in lieu of the places dropped in items 25, 26, and 27. Because of the scientific and technical nature of the work of the bureau, it is necessary that the clerical force be of more than average ability. With the high salaries paid to stenographers and other clerical workers in all sections of the country, it is impossible to secure efficient help of this class for less than \$1,000, and frequently it is necessary to pay even inexperienced stenographers entrance salaries of \$1,200 or more. Under existing conditions, the \$840 and \$900 places are practically useless. The bureau's statutory roll is top-heavy with low-salaried positions, with comparatively few places of the higher grades, which makes it impossible to promote efficient employees sufficiently to keep them contented and in a frame of mind to render the best service. The result is a constant turnover in the clerical force.</p> <p>The four new places as executive clerk at \$2,400 each are desired in order to promote one executive clerk now receiving \$2,000 and three receiving \$1,980 each. These clerks are performing the highest type of clerical work, they have been long in the service, and their salaries have remained practically stationary for years.</p>		
(9) One executive clerk (<i>R. S., p. 87, secs. 520-523; acts Apr. 23, 1904, vol. 33, p. 281, sec. 1; May 31, 1920, vol. 41, pp. 700, 701, sec. 1</i>) -----	2,000.00	
(10) Four executive clerks, at \$1,980 each (<i>same acts</i>) -----	7,920.00	
(11) One seed inspector (<i>same acts</i>) -----	1,000.00	
(12) One seed warehouseman (<i>same acts</i>) -----	1,400.00	
(13) One seed warehouseman (<i>same acts</i>) -----	1,000.00	
(14) Twelve clerks, class 4 (<i>same acts</i>) -----	21,600.00	
(15) Twenty clerks, class 3 (increase of 3) (<i>same acts</i>) -----	32,000.00	
NOTE.—See note under item 8.		
(16) Twelve clerks, at \$1,500 each (increase of 7) (<i>same acts</i>) ----	18,000.00	
NOTE.—See note under item 8.		
(17) Twenty-eight clerks, class 2 (<i>same acts</i>) -----	39,200.00	
(18) Three clerks, at \$1,320 each (<i>same acts</i>) -----	3,960.00	
(19) Eighty-nine clerks, class 1 (<i>same acts</i>) -----	106,800.00	
(20) Two clerks or draftsmen, at \$1,200 each (<i>same acts</i>) -----	2,400.00	
(21) Two clerks, at \$1,100 each (<i>same acts</i>) -----	2,200.00	
(22) Five clerks, at \$1,080 each (<i>same acts</i>) -----	5,400.00	
(23) Seven clerks, at \$1,020 each (<i>same acts</i>) -----	7,140.00	
(24) Thirty clerks, at \$1,000 each (<i>same acts</i>) -----	30,000.00	
(25) Twenty-six clerks, at \$900 each.		
NOTE.—See note under item 8.		
(26) One clerk or draftsman, \$900.		
NOTE.—See note under item 8.		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>Salaries, Bureau of Plant Industry—Continued.</i>		
(27) 【Eleven clerks, at \$840 each.】		
NOTE.—See note under item 8.		
(28) One laborer (<i>R. S., p. 87, secs. 520–523; acts Apr. 23, 1904, vol. 33, p. 281, sec. 1; May 31, 1920, vol. 41, pp. 700, 701, sec. 1</i>) -	\$780. 00	
(29) 【Fifty-three messengers or laborers, at \$720 each.】		
NOTE.—The designation of these positions has been changed to laborer, and the places combined with item 30. No messengers are employed at the present time by the Bureau of Plant Industry, hence the double title is unnecessary. See item 30.		
(30) Eighty-eight laborers, at \$720 each (<i>submitted</i>) -	63, 360. 00	
NOTE.—Fifty-three of the above places are transferred from item 29. The remaining 35 places are submitted in lieu of 8 messengers or laborers, at \$660 each, 17 messengers or laborers, at \$600 each, and 21 messengers or laborers, at \$540 each (see items 31, 32, and 64). This change will make the minimum compensation for laborer in the bureau \$720 per annum. It is impossible to secure and retain the services of competent laborers for less than \$720 in view of the higher rates prevailing in outside employment.		
(31) 【Eight messengers or laborers, at \$660 each.】		
NOTE.—See note under item 30.		
(32) 【Seventeen messengers or laborers, at \$600 each.】		
NOTE.—See note under item 30.		
(33) One artist (<i>R. S., p. 87, secs. 520–523; acts Apr. 23, 1904, vol. 33, p. 281, sec. 1; May 31, 1920, vol. 41, pp. 700, 701, sec. 1</i>) -	1, 620. 00	
(34) One clerk or artist (<i>same acts</i>) -	1, 400. 00	
(35) Two clerks or artists, at \$1,200 each (<i>same acts</i>) -	2, 400. 00	
(36) Two laboratory aids, at \$1,440 each (<i>same acts</i>) -	2, 880. 00	
(37) One laboratory aid (<i>same acts</i>) -	1, 380. 00	
(38) Four laboratory aids or clerks, at \$1,200 each (<i>same acts</i>) -	4, 800. 00	
(39) One laboratory aid, clerk, or skilled laborer (<i>same acts</i>) -	1, 080. 00	
(40) Three laboratory aids, clerks, or skilled laborers, at \$1,020 each (<i>same acts</i>) -	3, 060. 00	
(41) Seven laboratory aids, at \$960 each (increase of 5) (<i>same acts</i>) -	6, 720. 00	
NOTE.—The above new places are in lieu of 7 laboratory aids at \$720 each. This will make the minimum salary of laboratory aids in the Bureau of Plant Industry \$960. It is impossible to hold the services of this class of help at a lower rate of compensation. (See item 44.)		
(42) Two laboratory aids, at \$900 each (<i>same acts</i>) -	1, 800. 00	
(43) Six laboratory aids, at \$840 each (<i>same acts</i>) -	5, 040. 00	
(44) 【Seven laboratory aids, at \$720 each.】		
NOTE.—See note under item 41.		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>Salaries, Bureau of Plant Industry—Continued.</i>		
(45) One map tracer or laboratory aid (<i>R. S.</i> , p. 87, secs. 520-523; acts Apr. 23, 1904, vol. 33, p. 281, sec. 1; May 31, 1920, vol. 41, pp. 700, 701, sec. 1) -----	\$900. 00	
(46) Two gardeners, at \$1,440 each (<i>same acts</i>) -----	2, 880. 00	
(47) Seven gardeners, at \$1,200 each (increase of 3) (<i>same acts</i>) ..	8, 400. 00	
NOTE.—These three new places and 9 gardeners at \$900 in item 49 are submitted in lieu of 12 gardeners at \$780 each. These changes will enable the bureau to promote to \$1,200 three of its most competent gardeners now receiving \$1,100, three skilled gardeners from \$900 to \$1,100, and 12 from \$780 to \$900. All are very efficient men who have been long in the service, most of them without promotion for six or seven years. Gardeners outside the Government service are much better paid. (See item 50.)		
(48) Eight gardeners, at \$1,100 each (<i>same acts</i>) -----	8, 800. 00	
(49) Twenty-four gardeners, at \$900 each (increase of 9) (<i>same acts</i>) -----	21, 600. 00	
NOTE.—See note under item 47.		
(50) Seven gardeners, at \$780 each (decrease of 12) (<i>same acts</i>) ---	5, 460. 00	
NOTE.—See note under item 47.		
(51) One skilled laborer (<i>same acts</i>) -----	1, 100. 00	
(52) One skilled laborer (<i>same acts</i>) -----	960. 00	
(53) Two skilled laborers, at \$900 each (<i>same acts</i>) -----	1, 800. 00	
(54) Three skilled laborers, at \$840 each (<i>same acts</i>) -----	2, 520. 00	
(55) One assistant in technology (<i>same acts</i>) -----	1, 400. 00	
(56) One assistant in technology (<i>same acts</i>) -----	1, 380. 00	
(57) One general mechanic (<i>same acts</i>) -----	1, 400. 00	
(58) One mechanic (increase of \$120) (<i>same acts</i>) -----	1, 200. 00	
NOTE.—This mechanic is a competent man employed in connection with the management of the greenhouses. It is believed he is well worth the increase requested. (See also note under item 60.)		
(59) One mechanical assistant (<i>same acts</i>) -----	1, 400. 00	
(60) One mechanical assistant (increase of \$120) (<i>same acts</i>) -----	1, 320. 00	
NOTE.—This employee is a general mechanic employed in connection with the maintenance of the 32 greenhouses on the grounds of the Department. Men engaged on similar work in commercial life receive \$8 a day.		
(61) One carpenter (increase of \$300) (<i>same acts</i>) -----	1, 200. 00	
NOTE.—This employee and the painter at \$900 (item 62) are employed at the Arlington farm and are very competent in their trades. Both have large families to support. In commercial work carpenters and painters now receive \$8 a day, and the bureau can not hope to retain such help at the low salary of \$900.		
(62) One painter (increase of \$300) (<i>same acts</i>) -----	1, 200. 00	
NOTE.—See note under item 61.		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.		Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.																																												
<i>Salaries, Bureau of Plant Industry—Continued.</i>																																															
(63)	One teamster (<i>R. S.</i> , p. 87, secs. 520-523; acts Apr. 23, 1904, vol. 33, p. 281, sec. 1; May 31, 1920, vol. 41, pp. 700, 701, sec. 1) -----	\$840. 00																																													
(64)	【Twenty-one messengers or laborers, at \$540 each.】 NOTE.—See note under item 30.																																														
(65)	Twenty-two messengers or laborers, at \$480 each (decrease of 7) (<i>same acts</i>) -----	10, 560. 00																																													
	NOTE.—Seven of the laborer places, at \$480, are now occupied by charwomen and have been combined with item 70.																																														
(66)	Five messenger boys, at \$660 each (<i>same acts</i>) -----	3, 300. 00																																													
(67)	Fourteen messenger boys, at \$600 each (<i>same acts</i>) -----	8, 400. 00																																													
(68)	Ten messenger boys, at \$480 each (<i>same acts</i>) -----	4, 800. 00																																													
(69)	【Five messenger boys, at \$420 each.】 NOTE.—It is difficult to keep these places filled because of the low salary. The positions are therefore useless to the bureau and can be dropped. This will make \$480 the minimum salary for messenger boys.																																														
(70)	Eleven charwomen, at \$480 each (increase of 7) (<i>same acts</i>) -	5, 280. 00																																													
	NOTE.—See note under item 65.																																														
(71)	Twenty-one charwomen, at \$240 each (<i>same acts</i>) -----	5, 040. 00																																													
		\$511, 380. 00	\$517, 300. 00																																												
<table border="0"> <tr> <td>Appropriation for 1912.....</td><td>\$330,470</td><td>Estimate for 1913.....</td><td>\$374,790</td></tr> <tr> <td>Appropriation for 1913.....</td><td>379,820</td><td>Estimate for 1914.....</td><td>421,380</td></tr> <tr> <td>Appropriation for 1914.....</td><td>427,690</td><td>Estimate for 1915.....</td><td>476,520</td></tr> <tr> <td>Appropriation for 1915.....</td><td>478,170</td><td>Estimate for 1916.....</td><td>429,430</td></tr> <tr> <td>Appropriation for 1916.....</td><td>424,150</td><td>Estimate for 1917.....</td><td>418,240</td></tr> <tr> <td>Appropriation for 1917.....</td><td>418,240</td><td>Estimate for 1918.....</td><td>422,660</td></tr> <tr> <td>Appropriation for 1918.....</td><td>419,380</td><td>Estimate for 1919.....</td><td>440,020</td></tr> <tr> <td>Appropriation for 1919.....</td><td>440,020</td><td>Estimate for 1920.....</td><td>494,380</td></tr> <tr> <td>Appropriation for 1920.....</td><td>491,280</td><td>Estimate for 1921.....</td><td>529,760</td></tr> <tr> <td>Appropriation for 1921.....</td><td>517,300</td><td>Estimate for 1922.....</td><td>511,380</td></tr> </table>				Appropriation for 1912.....	\$330,470	Estimate for 1913.....	\$374,790	Appropriation for 1913.....	379,820	Estimate for 1914.....	421,380	Appropriation for 1914.....	427,690	Estimate for 1915.....	476,520	Appropriation for 1915.....	478,170	Estimate for 1916.....	429,430	Appropriation for 1916.....	424,150	Estimate for 1917.....	418,240	Appropriation for 1917.....	418,240	Estimate for 1918.....	422,660	Appropriation for 1918.....	419,380	Estimate for 1919.....	440,020	Appropriation for 1919.....	440,020	Estimate for 1920.....	494,380	Appropriation for 1920.....	491,280	Estimate for 1921.....	529,760	Appropriation for 1921.....	517,300	Estimate for 1922.....	511,380				
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NOTE.—Apparent ^{de} increase, \$5,920; actual decrease, \$5,920, as follows:																																															
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Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.	
<i>Salaries, Bureau of Plant Industry—Continued.</i>			
<i>Places dropped.</i>			
1 landscape gardener.....	\$1,800		
26 clerks, at \$900 each.....	23,400		
1 clerk or draftsman.....	900		
11 clerks, at \$840 each.....	9,240		
53 messengers or laborers, at \$720 each.....	38,160		
8 messengers or laborers, at \$660 each.....	5,280		
17 messengers or laborers, at \$600 each.....	10,200		
7 laboratory aids, at \$720 each.....	5,040		
12 gardeners, at \$780 each.....	9,360		
21 messengers or laborers, at \$540 each.....	11,340		
7 messengers or laborers, at \$480 each.....	3,360		
5 messenger boys, at \$420 each.....	2,100		
	<hr/> \$120,180		
Decrease.....	5,920		
<i>General Expenses, Bureau of Plant Industry—</i>			
(72) For all necessary expenses in the investigation of fruits, fruit trees, grain, cotton, tobacco, vegetables, grasses, forage, drug, medicinal, poisonous, fiber, and other plants and plant industries, in cooperation with other branches of the department, the State experiment stations, and practical farmers, and for the erection of necessary farm buildings: <i>Provided</i> , That the cost of any building erected shall not exceed \$1,500; for field and station expenses, including fences, drains, and other farm improvements; for repairs in the District of Columbia and elsewhere; for rent outside of the District of Columbia; and for the employment of all investigators, local and special agents, agricultural explorers, experts, clerks, illustrators, assistants, and all labor and other necessary expenses in the city of Washington and elsewhere required for the investigations, experiments, and demonstrations herein authorized, as follows (<i>acts Apr. 18, 1900, vol. 31, pp. 135, 136, secs. 1-5; Aug. 24, 1912, vol. 37, pp. 506, 507, secs. 1-4; May 31, 1920 vol. 41, pp. 701, 704, sec. 1</i>):			
(73) For investigations of plant diseases and pathological collections, including the maintenance of a plant-disease survey [\$62,020] (<i>same acts</i>).....		\$92,020.00	
Appropriation for 1912.....	\$22,930	Estimate for 1913.....	\$22,930
Appropriation for 1913.....	25,000	Estimate for 1914.....	30,000
Appropriation for 1914.....	30,000	Estimate for 1915.....	37,000
Appropriation for 1915.....	37,000	Estimate for 1916.....	37,000
Appropriation for 1916.....	34,500	Estimate for 1917.....	38,500
Appropriation for 1917.....	38,500	Estimate for 1918.....	62,500
Appropriation for 1918.....	62,500	Estimate for 1919.....	62,020
Appropriation for 1919.....	62,020	Estimate for 1920.....	81,320
Appropriation for 1920.....	62,020	Estimate for 1921.....	77,020
Appropriation for 1921.....	62,020	Estimate for 1922.....	92,020
NOTE.—There is an increase in this item of \$30,000, which it is proposed to use as follows:			
(a) \$15,000 for the investigation of soft rots of potatoes and other vegetables, particularly the bacterial storage rots, which cause losses amounting to millions of dollars annually.			
(b) \$15,000 for enlarging the plant-disease survey. The value of this service as an aid to research and extension work in the control of plant diseases has been amply demonstrated, but with present funds it has been difficult to satisfactorily organize the work			

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.					Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Bureau of Plant Industry—Continued.</i>						
Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.		
Salaries:		Number.	Number.	Number.		
Pathologist in charge..... per annum	\$4,500.00	1	1	1		
Pathologist.....do	3,500.00	1	1	1		
Pathologist.....do	3,000.00	1	1	1		
Pathologist.....do	2,500.00	1				
Pathologist.....do	2,460.00			1		
Pathologist.....do	2,325.00			1		
Pathologist.....do	2,280.00	2	2	2		
Pathologist.....do	2,220.00	2	2	2		
Pathologist.....do	2,160.00	1	1	1		
Pathologist.....do	2,040.00	4	4	1		
Pathologist.....do	1,860.00			1		
Pathologist.....do	1,800.00	1				
Pathologist.....do	1,500.00			1		
Mycologist.....do	2,400.00	1	1	1		
Mycologist.....do	2,280.00	1	1	1		
Scientific assistant.....do	1,800.00	3	2	3		
Scientific assistant.....do	1,740.00	1	1	1		
Scientific assistant.....do	1,620.00	1	1	1		
Scientific assistant.....do	1,560.00			1		
Scientific assistant.....do	1,440.00	1	1	1		
Botanical translator.....do	1,620.00	1	1	1		
Botanical translator.....do	1,500.00			1		
Assistant.....do	1,400.00	1		1		
Assistant.....do	1,200.00	4	2			
Assistant.....do	1,100.00	1	1	1		
Agent.....do	1,200.00	1	1			
Agent.....do	90.00			1		
Field aid, messenger, and collaborators—						
\$900 to \$1..... per annum		2	2	50		
\$100 to \$1..... per month		2	2	103		
Wages:						
Mechanician..... per annum	1,500.00	1	1			
		35	29	179		
Salaries.....		\$61,157.00	\$52,507.00	\$46,494.83		
Wages.....		1,500.00	1,500.00			
OTHER OBJECTS OF EXPENDITURE.						
Stationery.....		1,050.00	250.00	726.83		
Traveling expenses.....		13,750.00	4,750.00	6,611.29		
Equipment and material.....		6,991.00	740.00	2,804.65		
Miscellaneous items.....		7,572.00	2,273.00	4,893.22		
Total.....		92,020.00	62,020.00	61,530.82		

- (74) For the investigation of diseases of orchard and other fruits, **[\$80,935] \$101,135: Provided,** That \$8,000 of said amount shall be available for the investigation of diseases of the pecan (*acts Apr. 18, 1900, vol. 31, pp. 135, 136, secs. 1-5; Aug. 24, 1912, vol. 37, pp. 506, 507, secs. 1-4; May 31, 1920, vol. 41, pp. 701, 704, sec. 1*) ----- **\$101,135.00**

Appropriation for 1912.....	\$42,075	Estimate for 1913.....	\$40,675
Appropriation for 1913.....	40,675	Estimate for 1914.....	45,435
Appropriation for 1914.....	40,675	Estimate for 1915.....	52,675
Appropriation for 1915.....	52,675	Estimate for 1916.....	58,255
Appropriation for 1916.....	56,115	Estimate for 1917.....	63,615
Appropriation for 1917.....	63,615	Estimate for 1918.....	71,415
Appropriation for 1918.....	76,415	Estimate for 1919.....	75,935
Appropriation for 1919.....	75,935	Estimate for 1920.....	75,935
Appropriation for 1920.....	80,935	Estimate for 1921.....	87,935
Appropriation for 1921.....	80,935	Estimate for 1922.....	101,135

NOTE.—An increase of \$20,200 is recommended in this item, which, if allowed, will be expended as follows:

(a) \$10,700 for enlarging orchard spraying experiments. This project yields direct returns in fruit production by increasing both the quantity and quality of the output of deciduous orchards. Spraying methods are now undergoing decided changes through the use of dry dusting powders, but the practical limitations upon the use of dusting as compared with liquid sprays are as yet undetermined.

(b) \$2,500 for extending investigations of physiological fruit diseases. Serious losses occur to orchardists in all the fruit-producing districts from obscure physiological diseases. The losses apparently are more serious in the western irrigated and partly irrigated orchards. Present funds are insufficient to undertake this work in an adequate way.

(c) \$7,000 for reinstating the pathological market inspection of fruit, in cooperation with the Bureau of Markets and Crop Estimates. This project was interrupted when war-emergency funds were withdrawn. Work during the war period consisted of investigation of the condition of fruit shipments arriving in large distributing markets, for the purpose of distinguishing the different kinds of decay, and tracing certain types to improper methods of production, with the view of applying remedial measures. Both producers and handlers of fruit have strongly urged that this work be resumed.

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
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General Expenses, Bureau of Plant Industry—Continued.

Fruit diseases.

Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.
<i>Salaries:</i>		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>
Pathologist in charge.....per annum..	\$4,260.00	1	1	1
Pathologist in charge.....do.....	4,000.00	1	1	1
Pathologist.....do.....	4,000.00	1	1	1
Pathologist.....do.....	3,760.00	1	1	1
Pathologist.....do.....	3,750.00	1	1	1
Pathologist.....do.....	3,500.00	1	1	2
Pathologist.....do.....	3,240.00	2	1	1
Pathologist.....do.....	3,000.00	2	2	2
Pathologist.....do.....	2,520.00	1	1	2
Pathologist.....do.....	2,460.00	1	1	1
Pathologist.....do.....	2,280.00	3	3	3
Pathologist.....do.....	2,220.00	2	1	1
Pathologist.....do.....	2,040.00	3	2	1
Pathologist (temporary).....do.....	1,980.00	1	1	1
Botanical artist.....do.....	2,040.00	1	1	1
Scientific assistant.....do.....	1,860.00	1	1	1
Scientific assistant.....do.....	1,800.00	4	2	3
Scientific assistant.....do.....	1,680.00	1	1	1
Scientific assistant.....do.....	1,620.00	3	1	1
Scientific assistant.....do.....	1,500.00	1	1	1
Scientific assistant.....do.....	1,440.00	1	1	1
Scientific assistant.....do.....	1,380.00	1	1	1
Scientific assistant.....do.....	1,200.00	1	1	1
Assistant.....do.....	1,200.00	2	1	1
Assistant (temporary).....per month..	150.00	1	1	3
Assistant (temporary).....do.....	120.00	1	1	1
Assistant.....per annum.....	1,080.00	1	1	1
Laboratorian.....do.....	1,500.00	1	1	1
Laboratory aids, \$1,080 to \$600.....do.....		2	3	2
<i>Wages:</i>				
Miscellaneous and temporary labor.....do.....	600.00	1	1	2
Per month.....	50.00	1	1	2
Per diem.....	4.00	1	1	2
		35	28	37
<i>Salaries.....</i>		\$72,656.00	\$57,790.00	\$50,384.67
<i>Wages.....</i>		600.00	1,296.00	378.46
OTHER OBJECTS OF EXPENDITURE.				
Stationery.....		980.00	500.00	322.46
Traveling expenses.....		12,500.00	8,600.00	7,608.61
Equipment and material.....		5,120.00	2,800.00	3,695.07
Miscellaneous items.....		1,279.00	1,949.00	9,555.44
Total.....		93,135.00	72,935.00	71,944.71

Pecan diseases.

Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.
<i>Salaries:</i>		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>
Pathologist.....per annum.....	\$2,040.00	1	1	1
Scientific assistant.....do.....	2,040.00	1	1	1
Scientific assistant.....do.....	1,860.00	1	1	1
		2	2	2
<i>Salaries.....</i>		\$4,080.00	\$3,900.00	\$3,992.60
OTHER OBJECTS OF EXPENDITURE.				
Traveling expenses.....		2,320.00	2,500.00	2,246.95
Equipment and material.....		1,200.00	1,200.00	304.45
Miscellaneous items.....		400.00	400.00	1,455.21
Total.....		8,000.00	8,000.00	7,999.21

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Bureau of Plant Industry—Continued.</i>		
(75) For conducting such investigations of the nature and means of communication of the disease of citrus trees, known as citrus canker, and for applying such methods of eradication or control of the disease as in the judgment of the Secretary of Agriculture may be necessary, including the payment of such expenses and the employment of such persons and means, in the city of Washington and elsewhere, and cooperation with such authorities of the States concerned, organizations of growers, or individuals, as he may deem necessary to accomplish such purposes, \$109,720, and, in the discretion of the Secretary of Agriculture, no expenditures shall be made for these purposes until a sum or sums at least equal to such expenditures shall have been appropriated, subscribed, or contributed by State, county, or local authorities; or by individuals or organizations for the accomplishment of such purposes: <i>Provided</i> , That no part of the money herein appropriated shall be used to pay the cost or value of trees or other property injured or destroyed (<i>acts Apr. 18, 1900, vol. 31, pp. 135, 136, secs. 1-5; Aug. 24, 1912, vol. 37, pp. 506, 507, secs. 1-4; May 31, 1920, vol. 41, pp. 701, 704, sec. 1</i>) -----		\$109,720.00
Appropriation for 1918..... \$430,000	Estimate for 1919..... \$250,000	
Appropriation for 1919..... 250,000	Estimate for 1920..... 196,320	
Appropriation for 1920..... 196,320	Estimate for 1921..... 103,720	
Appropriation for 1921..... 103,720	Estimate for 1922..... 103,720	
Employees.	Rate.	Esti- mated, 1922.
		Appro- priated, 1921.
		Ex- pended, 1920.
Salaries:		
Associate chief of bureau (part time).....per annum..	\$4,500.00	Number. 1
Physiologist (part time).....do....	4,500.00	Number. 1
Physiologist.....do....	3,240.00	Number. 1
Physiologist (part time).....do....	2,220.00	Number. 2
Pathologist.....do....	3,500.00	Number. 1
Pathologist.....do....	1,620.00	Number. 1
Breeder (part time).....do....	2,280.00	Number. 1
Propagator.....do....	1,800.00	Number. 1
Propagator.....do....	1,560.00	Number. 1
Interpreter.....do....	1,800.00	Number. 1
Field assistant.....do....	1,620.00	Number. 1
Botanical assistant (part time).....do....	1,200.00	Number. 1
Translator.....do....	1,620.00	Number. 1
Translator (part time).....do....	1,500.00	Number. 1
Translator.....do....	1,440.00	Number. 1
Scientific assistant.....do....	1,600.00	Number. 1
Assistant.....do....	1,980.00	Number. 1
Assistant.....do....	1,400.00	Number. 1
Assistant.....do....	1,200.00	Number. 1
Agent.....do....	2,400.00	Number. 1
Agent.....do....	2,000.00	Number. 1
Agent.....do....	1,400.00	Number. 1
Agent.....do....	1,350.00	Number. 1
Agent.....per month..	195.00	Number. 2
Agent.....do....	175.00	Number. 1
Agent.....do....	150.00	Number. 7
Agent.....do....	130.00	Number. 4
Agent.....do....	125.00	Number. 5
Agent.....do....	116.00	Number. 3
Agent.....do....	110.00	Number. 1
Agent.....do....	100.00	Number. 4
Agent.....do....	90.00	Number. 3
Agent.....do....	85.00	Number. 1
Clerk.....per annum..	1,600.00	Number. 1
Field assistants, agents, and collaborators—		
\$750 to \$1.....do....		5
\$80 to \$1.....per month..		2
\$10.50 to \$3.....per diem..		72
Wages:		
Miscellaneous temporary labor—		
\$10 to \$2.50.....per month..		2
	111	110
Salaries.....	\$81,820.00	\$81,820.00
Wages.....		\$140,818.18
OTHER OBJECTS OF EXPENDITURE.		3,748.89
Stationery.....	800.00	800.00
Traveling expenses.....	22,900.00	22,900.00
Equipment and material.....	2,000.00	2,000.00
Miscellaneous items.....	2,200.00	2,200.00
Total.....	109,720.00	109,720.00
		178,880.30

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.																																																																																																																																																																																																																																																																	
<i>General Expenses, Bureau of Plant Industry—Continued.</i>																																																																																																																																																																																																																																																																			
(76) For the investigation of diseases of forest and ornamental trees and shrubs, including a study of the nature and habits of the parasitic fungi causing the chestnut-tree bark disease, the white-pine blister rust, and other epidemic tree diseases, for the purpose of discovering new methods of control and applying methods of eradication or control already discovered (<i>acts Apr. 18, 1900, vol. 31, pp. 135, 136, secs. 1-5; Aug. 24, 1912, vol. 37, pp. 506, 507, secs. 1-4; May 31, 1920, vol. 41, pp. 701, 704, sec. 1</i>) -----	\$81, 115. 00																																																																																																																																																																																																																																																																		
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Appropriation for 1921..... 81, 115	Estimate for 1922..... 81, 115																																																																																																																																																																																																																																																																		
<table><tr><th>Employees.</th><th>Rate.</th><th>Esti- mated, 1922.</th><th>Appro- priated, 1921.</th><th>Ex- pended, 1920.</th></tr><tr><td>Salaries:</td><td></td><td><i>Number.</i></td><td><i>Number.</i></td><td><i>Number.</i></td></tr><tr><td>Pathologist in charge..... per annum.</td><td>\$4, 000. 00</td><td>1</td><td>1</td><td></td></tr><tr><td>Pathologist in charge..... do.....</td><td>3, 750. 00</td><td></td><td></td><td>1</td></tr><tr><td>Pathologist..... do.....</td><td>3, 500. 00</td><td>2</td><td>2</td><td></td></tr><tr><td>Pathologist..... do.....</td><td>3, 240. 00</td><td>2</td><td>2</td><td>2</td></tr><tr><td>Pathologist..... do.....</td><td>3, 180. 00</td><td></td><td></td><td>1</td></tr><tr><td>Pathologist..... do.....</td><td>3, 000. 00</td><td>1</td><td>1</td><td>2</td></tr><tr><td>Pathologist..... do.....</td><td>2, 760. 00</td><td>1</td><td>1</td><td>2</td></tr><tr><td>Pathologist..... do.....</td><td>2, 700. 00</td><td>1</td><td>1</td><td>1</td></tr><tr><td>Pathologist..... do.....</td><td>2, 520. 00</td><td>1</td><td>1</td><td>1</td></tr><tr><td>Pathologist..... do.....</td><td>2, 500. 00</td><td>1</td><td>2</td><td>1</td></tr><tr><td>Pathologist..... do.....</td><td>2, 400. 00</td><td>1</td><td>1</td><td>1</td></tr><tr><td>Pathologists..... do.....</td><td>2, 280. 00</td><td></td><td></td><td>2</td></tr><tr><td>Pathologist..... do.....</td><td>2, 040. 00</td><td>1</td><td>1</td><td>1</td></tr><tr><td>Pathologist..... do.....</td><td>1, 800. 00</td><td></td><td></td><td>3</td></tr><tr><td>Pathologist (temporary)..... per month.</td><td>300. 00</td><td>1</td><td>1</td><td></td></tr><tr><td>Pathologist (temporary)..... do.....</td><td>250. 00</td><td>1</td><td>1</td><td></td></tr><tr><td>Pathologist..... do.....</td><td>225. 00</td><td></td><td></td><td>1</td></tr><tr><td>Physiologist..... per annum.</td><td>2, 250. 00</td><td></td><td></td><td>1</td></tr><tr><td>Assistant..... do.....</td><td>1, 980. 00</td><td>1</td><td>1</td><td></td></tr><tr><td>Assistant..... do.....</td><td>1, 800. 00</td><td>1</td><td>1</td><td>1</td></tr><tr><td>Assistant..... do.....</td><td>1, 620. 00</td><td>3</td><td>3</td><td>3</td></tr><tr><td>Assistant..... do.....</td><td>1, 560. 00</td><td>2</td><td>2</td><td>1</td></tr><tr><td>Assistant..... do.....</td><td>1, 500. 00</td><td></td><td></td><td>1</td></tr><tr><td>Assistant..... do.....</td><td>1, 440. 00</td><td></td><td></td><td>4</td></tr><tr><td>Assistant..... do.....</td><td>1, 350. 00</td><td></td><td></td><td>2</td></tr><tr><td>Assistant..... do.....</td><td>1, 200. 00</td><td>2</td><td>1</td><td>1</td></tr><tr><td>Assistant..... do.....</td><td>1, 080. 00</td><td></td><td></td><td>2</td></tr><tr><td>Assistants (temporary)..... per month.</td><td>100. 00</td><td></td><td>2</td><td></td></tr><tr><td>Superintendent..... per annum.</td><td>1, 620. 00</td><td>2</td><td>2</td><td>1</td></tr><tr><td>Superintendent..... do.....</td><td>1, 440. 00</td><td></td><td></td><td>1</td></tr><tr><td>Inspector..... do.....</td><td>1, 440. 00</td><td>1</td><td>1</td><td></td></tr><tr><td>Inspector..... do.....</td><td>1, 200. 00</td><td></td><td></td><td>1</td></tr><tr><td>Clerk..... per month.</td><td>100. 00</td><td></td><td></td><td>2</td></tr><tr><td>Agent..... do.....</td><td>225. 00</td><td></td><td></td><td>1</td></tr><tr><td>Agent..... do.....</td><td>100. 00</td><td></td><td></td><td>1</td></tr><tr><td>Assistants, student assistants, and collaborators—</td><td></td><td></td><td></td><td></td></tr><tr><td> \$900 to \$1..... per annum.....</td><td></td><td>3</td><td>3</td><td>3</td></tr><tr><td> \$25 to \$1..... per month.....</td><td></td><td>1</td><td>1</td><td>1</td></tr><tr><td>Wages:</td><td></td><td></td><td></td><td></td></tr><tr><td> Laborers (temporary)..... do.....</td><td>75. 00</td><td>1</td><td></td><td>2</td></tr><tr><td></td><td></td><td>31</td><td>32</td><td>48</td></tr><tr><td>Salaries.....</td><td></td><td>\$57, 285. 00</td><td>\$59, 110. 00</td><td>\$61, 286. 42</td></tr><tr><td>Wages.....</td><td></td><td>900. 00</td><td></td><td>1, 118. 74</td></tr><tr><td colspan="5">OTHER OBJECTS OF EXPENDITURE.</td></tr><tr><td>Stationery.....</td><td></td><td>900. 00</td><td>750. 00</td><td>\$94. 12</td></tr><tr><td>Traveling expenses.....</td><td></td><td>15, 900. 00</td><td>15, 300. 00</td><td>14, 383. 14</td></tr><tr><td>Equipment and material.....</td><td></td><td>4, 025. 00</td><td>3, 900. 00</td><td>3, 240. 74</td></tr><tr><td>Miscellaneous items.....</td><td></td><td>2, 105. 00</td><td>2, 055. 00</td><td>4, 358. 69</td></tr><tr><td>Total.....</td><td></td><td>81, 115. 00</td><td>81, 115. 00</td><td>85, 281. 85</td></tr></table>			Employees.	Rate.	Esti- mated, 1922.	Appro- priated, 1921.	Ex- pended, 1920.	Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>	Pathologist in charge..... per annum.	\$4, 000. 00	1	1		Pathologist in charge..... do.....	3, 750. 00			1	Pathologist..... do.....	3, 500. 00	2	2		Pathologist..... do.....	3, 240. 00	2	2	2	Pathologist..... do.....	3, 180. 00			1	Pathologist..... do.....	3, 000. 00	1	1	2	Pathologist..... do.....	2, 760. 00	1	1	2	Pathologist..... do.....	2, 700. 00	1	1	1	Pathologist..... do.....	2, 520. 00	1	1	1	Pathologist..... do.....	2, 500. 00	1	2	1	Pathologist..... do.....	2, 400. 00	1	1	1	Pathologists..... do.....	2, 280. 00			2	Pathologist..... do.....	2, 040. 00	1	1	1	Pathologist..... do.....	1, 800. 00			3	Pathologist (temporary)..... per month.	300. 00	1	1		Pathologist (temporary)..... do.....	250. 00	1	1		Pathologist..... do.....	225. 00			1	Physiologist..... per annum.	2, 250. 00			1	Assistant..... do.....	1, 980. 00	1	1		Assistant..... do.....	1, 800. 00	1	1	1	Assistant..... do.....	1, 620. 00	3	3	3	Assistant..... do.....	1, 560. 00	2	2	1	Assistant..... do.....	1, 500. 00			1	Assistant..... do.....	1, 440. 00			4	Assistant..... do.....	1, 350. 00			2	Assistant..... do.....	1, 200. 00	2	1	1	Assistant..... do.....	1, 080. 00			2	Assistants (temporary)..... per month.	100. 00		2		Superintendent..... per annum.	1, 620. 00	2	2	1	Superintendent..... do.....	1, 440. 00			1	Inspector..... do.....	1, 440. 00	1	1		Inspector..... do.....	1, 200. 00			1	Clerk..... per month.	100. 00			2	Agent..... do.....	225. 00			1	Agent..... do.....	100. 00			1	Assistants, student assistants, and collaborators—					\$900 to \$1..... per annum.....		3	3	3	\$25 to \$1..... per month.....		1	1	1	Wages:					Laborers (temporary)..... do.....	75. 00	1		2			31	32	48	Salaries.....		\$57, 285. 00	\$59, 110. 00	\$61, 286. 42	Wages.....		900. 00		1, 118. 74	OTHER OBJECTS OF EXPENDITURE.					Stationery.....		900. 00	750. 00	\$94. 12	Traveling expenses.....		15, 900. 00	15, 300. 00	14, 383. 14	Equipment and material.....		4, 025. 00	3, 900. 00	3, 240. 74	Miscellaneous items.....		2, 105. 00	2, 055. 00	4, 358. 69	Total.....		81, 115. 00	81, 115. 00	85, 281. 85		
Employees.	Rate.	Esti- mated, 1922.	Appro- priated, 1921.	Ex- pended, 1920.																																																																																																																																																																																																																																																															
Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>																																																																																																																																																																																																																																																															
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Pathologist in charge..... do.....	3, 750. 00			1																																																																																																																																																																																																																																																															
Pathologist..... do.....	3, 500. 00	2	2																																																																																																																																																																																																																																																																
Pathologist..... do.....	3, 240. 00	2	2	2																																																																																																																																																																																																																																																															
Pathologist..... do.....	3, 180. 00			1																																																																																																																																																																																																																																																															
Pathologist..... do.....	3, 000. 00	1	1	2																																																																																																																																																																																																																																																															
Pathologist..... do.....	2, 760. 00	1	1	2																																																																																																																																																																																																																																																															
Pathologist..... do.....	2, 700. 00	1	1	1																																																																																																																																																																																																																																																															
Pathologist..... do.....	2, 520. 00	1	1	1																																																																																																																																																																																																																																																															
Pathologist..... do.....	2, 500. 00	1	2	1																																																																																																																																																																																																																																																															
Pathologist..... do.....	2, 400. 00	1	1	1																																																																																																																																																																																																																																																															
Pathologists..... do.....	2, 280. 00			2																																																																																																																																																																																																																																																															
Pathologist..... do.....	2, 040. 00	1	1	1																																																																																																																																																																																																																																																															
Pathologist..... do.....	1, 800. 00			3																																																																																																																																																																																																																																																															
Pathologist (temporary)..... per month.	300. 00	1	1																																																																																																																																																																																																																																																																
Pathologist (temporary)..... do.....	250. 00	1	1																																																																																																																																																																																																																																																																
Pathologist..... do.....	225. 00			1																																																																																																																																																																																																																																																															
Physiologist..... per annum.	2, 250. 00			1																																																																																																																																																																																																																																																															
Assistant..... do.....	1, 980. 00	1	1																																																																																																																																																																																																																																																																
Assistant..... do.....	1, 800. 00	1	1	1																																																																																																																																																																																																																																																															
Assistant..... do.....	1, 620. 00	3	3	3																																																																																																																																																																																																																																																															
Assistant..... do.....	1, 560. 00	2	2	1																																																																																																																																																																																																																																																															
Assistant..... do.....	1, 500. 00			1																																																																																																																																																																																																																																																															
Assistant..... do.....	1, 440. 00			4																																																																																																																																																																																																																																																															
Assistant..... do.....	1, 350. 00			2																																																																																																																																																																																																																																																															
Assistant..... do.....	1, 200. 00	2	1	1																																																																																																																																																																																																																																																															
Assistant..... do.....	1, 080. 00			2																																																																																																																																																																																																																																																															
Assistants (temporary)..... per month.	100. 00		2																																																																																																																																																																																																																																																																
Superintendent..... per annum.	1, 620. 00	2	2	1																																																																																																																																																																																																																																																															
Superintendent..... do.....	1, 440. 00			1																																																																																																																																																																																																																																																															
Inspector..... do.....	1, 440. 00	1	1																																																																																																																																																																																																																																																																
Inspector..... do.....	1, 200. 00			1																																																																																																																																																																																																																																																															
Clerk..... per month.	100. 00			2																																																																																																																																																																																																																																																															
Agent..... do.....	225. 00			1																																																																																																																																																																																																																																																															
Agent..... do.....	100. 00			1																																																																																																																																																																																																																																																															
Assistants, student assistants, and collaborators—																																																																																																																																																																																																																																																																			
\$900 to \$1..... per annum.....		3	3	3																																																																																																																																																																																																																																																															
\$25 to \$1..... per month.....		1	1	1																																																																																																																																																																																																																																																															
Wages:																																																																																																																																																																																																																																																																			
Laborers (temporary)..... do.....	75. 00	1		2																																																																																																																																																																																																																																																															
		31	32	48																																																																																																																																																																																																																																																															
Salaries.....		\$57, 285. 00	\$59, 110. 00	\$61, 286. 42																																																																																																																																																																																																																																																															
Wages.....		900. 00		1, 118. 74																																																																																																																																																																																																																																																															
OTHER OBJECTS OF EXPENDITURE.																																																																																																																																																																																																																																																																			
Stationery.....		900. 00	750. 00	\$94. 12																																																																																																																																																																																																																																																															
Traveling expenses.....		15, 900. 00	15, 300. 00	14, 383. 14																																																																																																																																																																																																																																																															
Equipment and material.....		4, 025. 00	3, 900. 00	3, 240. 74																																																																																																																																																																																																																																																															
Miscellaneous items.....		2, 105. 00	2, 055. 00	4, 358. 69																																																																																																																																																																																																																																																															
Total.....		81, 115. 00	81, 115. 00	85, 281. 85																																																																																																																																																																																																																																																															

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Bureau of Plant Industry—Continued.</i>		
(77) For applying such methods of eradication or control of the white-pine blister rust as in the judgment of the Secretary of Agriculture may be necessary, including the payment of such expenses and the employment of such persons and means in the city of Washington and elsewhere, in cooperation with such authorities of the States concerned, organizations, or individuals as he may deem necessary to accomplish such purposes, \$214,168, and in the discretion of the Secretary of Agriculture no expenditures shall be made for these purposes until a sum or sums at least equal to such expenditures shall have been appropriated, subscribed, or contributed by State, county, or local authorities, or by individuals or organizations for the accomplishment of such purposes: <i>Provided</i> , That no part of the money herein appropriated shall be used to pay the cost or value of trees or other property injured or destroyed (<i>acts Apr. 18, 1900, vol. 31, pp. 135, 136, secs. 1-5; Aug. 24, 1912, vol. 37, pp. 506, 507, secs. 1-4; May 31, 1920, vol. 41, pp. 701, 704, sec. 1</i>) -----	\$214, 168. 00	
Appropriation for 1918..... \$300,000	Estimate for 1919..... \$246,448	
Appropriation for 1919..... 230,448	Estimate for 1920..... 220,728	
Appropriation for 1920..... 220,728	Estimate for 1921..... 214,168	
Appropriation for 1921..... 214,168	Estimate for 1922..... 214,168	
Employees.	Rate.	Estimated, 1922.
		Appropriated, 1921.
		Expended, 1920.
Salaries:		
Pathologist in charge.....per annum..	\$4,000.00	Number. 1
Pathologist.....do.....	3,600.00	Number. 1
Pathologist.....do.....	3,400.00	Number. 3
Pathologist.....do.....	2,520.00	Number. 1
Pathologist.....do.....	2,400.00	Number. 3
Assistant.....do.....	2,040.00	Number. 2
Assistant.....do.....	2,000.00	Number. 1
Assistant.....do.....	1,980.00	Number. 1
Assistant.....do.....	1,920.00	Number. 1
Assistant.....do.....	1,800.00	Number. 3
Assistant.....do.....	1,620.00	Number. 3
Assistant.....do.....	1,600.00	Number. 1
Assistant.....do.....	1,500.00	Number. 7
Assistant.....do.....	1,400.00	Number. 1
Assistant.....do.....	1,200.00	Number. 4
Assistant.....do.....	1,100.00	Number. 3
Assistant.....do.....	1,080.00	Number. 2
Assistant.....do.....	1,000.00	Number. 1
Assistant (temporary).....per month..	225.00	Number. 1
Assistant (temporary).....do.....	200.00	Number. 2
Assistant (temporary).....do.....	175.00	Number. 2
Assistant (temporary).....do.....	150.00	Number. 5
Assistant (temporary).....do.....	135.00	Number. 1
Assistant (temporary).....do.....	125.00	Number. 1
Assistant (temporary).....do.....	100.00	Number. 1
Assistant (temporary).....do.....	105.00	Number. 1
Assistant (temporary).....do.....	100.00	Number. 5
Assistant (temporary).....do.....	90.00	Number. 3
Assistant (temporary).....do.....	85.00	Number. 16
Agent.....per annum..	1,800.00	Number. 1
Agent.....do.....	1,680.00	Number. 1
Agent.....do.....	1,500.00	Number. 1
Agent.....per month..	225.00	Number. 2
Agent.....do.....	150.00	Number. 1
Agent.....do.....	125.00	Number. 10
Agent.....do.....	100.00	Number. 3
Assistants, agents, messengers, and collaborators—		
\$600 to \$1.....per annum..		Number. 8
\$75 to \$25.....per month..		Number. 37
\$6.50 to \$4.....per diem..		Number. 14
Wages:		
Firemen.....per annum..	1,080.00	Number. 2
Miscellaneous and temporary labor—		
\$75 to \$9.....per month..		Number. 3
\$5 to \$1.50.....per diem..		Number. 428
		Number. 575
Salaries.....	\$100,095.00	\$93,000.00
Wages.....	43,073.00	35,000.00
OTHER OBJECTS OF EXPENDITURE.		
Stationery.....	5,000.00	4,000.00
Traveling expenses.....	55,000.00	60,760.00
Telephone and telegraph service.....	1,000.00	900.00
Equipment and material.....	3,000.00	3,000.00
Miscellaneous items.....	7,000.00	17,508.00
Total.....	214,168.00	217,366.22

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Bureau of Plant Industry—Continued.</i>		
(78) For the investigation of diseases of cotton, potatoes, truck crops, forage crops, drug and related plants [\$95,400] (acts Apr. 18, 1900, vol. 31, pp. 135, 136, secs. 1-5; Aug. 24, 1912, vol. 37, pp. 506, 507, secs. 1-4; May 31, 1920, vol. 41, pp. 701, 704, sec. 1):-----	\$125, 400. 00	
Appropriation for 1912..... \$24, 800 Estimate for 1913..... \$22, 000 Appropriation for 1913..... 22, 000 Estimate for 1914..... 30, 000 Appropriation for 1914..... 25, 000 Estimate for 1915..... 42, 000 Appropriation for 1915..... 46, 000 Estimate for 1916..... 51, 000 Appropriation for 1916..... 56, 000 Estimate for 1917..... 59, 000 Appropriation for 1917..... 59, 000 Estimate for 1918..... 82, 800 Appropriation for 1918..... 87, 800 Estimate for 1919..... 87, 800 Appropriation for 1919..... 87, 800 Estimate for 1920..... 87, 800 Appropriation for 1920..... 87, 800 Estimate for 1921..... 108, 900 Appropriation for 1921..... 95, 400 Estimate for 1922..... 125, 400		
<p>NOTE.—There is an increase in this item of \$30,000, which amount is desired for the following purposes:</p> <p>(a) \$5,000 for investigating potato diseases. Potato diseases, like mosaic and leaf-roll, which affect the quality of seed potatoes grown for interstate shipment, and potato decays which cause heavy losses in shipments arriving in the large markets of the country from southern and western sources, should receive greater attention. It is also desired to cooperate with the Office of Soil Fertility Investigations in determining more accurately the effect of soil conditions on the occurrence of disease. Increased costs of maintaining potato investigational work at the bureau's field stations in Maine and Colorado have made it necessary to practically suspend these activities. This work has been yielding important results and should be continued.</p> <p>(b) \$5,000 for sweet potato disease investigations. A specialist trained in physiology and biochemistry should be employed to study the field and storage rots of sweet potatoes. The work already done in the East on diseases of this crop should also be extended to California. The California Experiment Station has requested the Department's cooperation in studying its sweet potato disease problems.</p> <p>(c) \$3,000 for the investigation of truck crop diseases in California. The primary object of this work is to provide information on diseases of truck crops grown in California and shipped to eastern markets for use in connection with the Bureau of Markets and Crop Estimates project "Preservation of fruits and vegetables in transit and storage." The results already secured have been of great value to the markets work in helping the market pathologists to more accurately determine the causes for various transit troubles, because of a better knowledge of field conditions and the diseases present. Field control measures for certain diseases are being worked out as far as possible at the same time and advice given to shippers as to methods of handling and shipment which will reduce transit losses. There is need for enlarging this work.</p> <p>(d) \$4,000 for investigating nematode diseases of truck and forage crops. The economic losses from plant parasitic nematodes are beyond computation and present a problem that vitally affects agriculture in all the lighter soils of the Southern States and westward to the Pacific coast. The clover nematode in southern Idaho is a new pest that should be investigated promptly and thoroughly. General work on nematode control has been under way for several years, but the project has never received the support that its importance warrants.</p> <p>(e) \$5,000 for watermelon and cucumber disease investigations. Much remains to be done in perfecting means of control of cucumber mosaic, downy mildew, and anthracnose. Certain diseases of muskmelons, including a hitherto little-known fruit rot, which has caused serious injury to the crop in Florida and which also affects the watermelon, should be investigated. There is also need for renewing the campaign of instruction and spraying demonstrations in the proper treatment for stem-end rot of watermelons, which has had to be suspended during the current fiscal year because of insufficient funds.</p> <p>(f) \$3,000 for the investigation of pea diseases. Pea root rot is widely prevalent and causes much damage. Its cause is now under investigation and progress has been made toward control through a system of crop rotation. With the limited funds available, it has been possible to assign only one man to this problem. There is need for extending the work. Other disease problems affecting peas should also be studied, particularly diseases carried in or on the seed, which affect the quality of the cannery product.</p>		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.				Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Bureau of Plant Industry—Continued.</i>					
<p>(g) \$3,000 for cabbage and onion disease investigations. Additional work is needed to adapt the facts learned relative to onion diseases to the use of commercial growers and to demonstrate control methods. Wilt-resistant strains of three common varieties of cabbage have been developed by the Wisconsin Experiment Station, but work in adapting these to the needs of growers in other States, producing additional strains of different varieties to meet the requirements of other sections, and providing for the growing of the seed under expert supervision in the seed producing centers on Long Island and in Washington State should be adequately supported by the department.</p> <p>(h) \$1,000 for forage crop disease investigations. Requests for assistance in solving a number of diseases which affect forage crops, such as the stem rot and stem blight diseases of clover, alfalfa root-rot, etc., are constantly received, but very little work has been possible on these projects because of a shortage of funds. The small increase requested will enable the department to extend the work somewhat.</p> <p>(i) \$1,000 for the pathological market inspection of vegetables. As a result of the work that has been done along this line in the past, shippers, railway men, wholesale dealers, and others concerned in the truck business have been brought to a realization of the great economic importance of disease control and are anxious to introduce methods of handling and shipping which will reduce losses caused thereby. Provision should be made for adequately financing this work in the Bureau of Plant Industry.</p>					
Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.	
		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>	
Salaries:					
Pathologist in charge per annum.	\$4,260.00	1	1		
Pathologist in charge.....do.	4,000.00			1	
Pathologist.....do.	3,760.00	1	1		
Pathologist.....do.	3,500.00			1	
Pathologist.....do.	3,240.00	2	2		
Pathologist.....do.	2,640.00	1		1	
Pathologist.....do.	2,520.00			1	
Pathologist.....do.	2,500.00	3	3	1	
Pathologist.....do.	2,460.00	1	1	1	
Pathologist.....do.	2,400.00	6	3	2	
Pathologist.....do.	2,280.00	6	6	3	
Pathologist.....do.	2,040.00	3	2	7	
Pathologist.....do.	2,160.00	1	1	2	
Pathologist.....do.	1,980.00			1	
Pathologist.....do.	1,800.00	2	2	5	
Pathologist.....do.	1,620.00	1	1	1	
Physiologist.....do.	2,640.00		1	1	
Physiologist.....do.	2,280.00	1		1	
Biochemist.....do.	2,520.00	1	1	1	
Scientific assistant.....do.	2,040.00	1			
Scientific assistant.....do.	1,800.00	3		1	
Scientific assistant.....do.	1,680.00	1			
Scientific assistant.....do.	1,620.00			4	
Assistant.....do.	1,400.00	1	1		
Assistant (temporary).....do.	1,200.00			3	
Assistant (temporary).....do.	1,100.00			1	
Laboratory aid (temporary).....do.	1,020.00			2	
Assistants and collaborators—					
\$12.....do.		1	1	3	
\$125 to \$1.....per month.		4	6	1	
\$9.....per diem.		1	1	1	
\$0.40.....per hour.				1	
Wages:					
Miscellaneous temporary labor—					
\$720.....per annum.				1	
\$125 to \$70.....per month.		4		4	
\$3.50 to \$2.50.....per diem.		1	1	4	
		47	35	56	
Salaries.....		\$73,861.00	\$66,081.00	\$65,242.14	
Wages.....		5,860.00	1,200.00	808.18	
OTHER OBJECTS OF EXPENDITURE.					
Stationery.....		1,800.00	400.00	404.16	
Traveling expenses.....		26,705.00	18,033.00	8,184.03	
Equipment and material.....		11,224.00	5,336.00	2,368.43	
Miscellaneous items.....		5,950.00	4,350.00	10,278.87	
Total.....		125,400.00	95,400.00	87,285.51	

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.		
General Expenses, Bureau of Plant Industry—Continued.				
(79) For investigating the physiology of crop plants and for testing and breeding varieties thereof [\$46,860] (<i>acts Apr. 18, 1900, vol. 31, pp. 135, 136, secs. 1-5; Aug. 24, 1912, vol. 37, pp. 506, 507, sec. 1-4; May 31, 1920, vol. 41, pp. 701, 704, sec. 1</i>)	\$66, 860. 00			
Appropriation for 1912..... \$33, 015	Estimate for 1913..... \$30, 380			
Appropriation for 1913..... 30, 380	Estimate for 1914..... 36, 580			
Appropriation for 1914..... 33, 380	Estimate for 1915..... 44, 540			
Appropriation for 1915..... 44, 540	Estimate for 1916..... 47, 040			
Appropriation for 1916..... 44, 540	Estimate for 1917..... 49, 540			
Appropriation for 1917..... 49, 540	Estimate for 1918..... 54, 060			
Appropriation for 1918..... 49, 060	Estimate for 1919..... 48, 460			
Appropriation for 1919..... 48, 460	Estimate for 1920..... 48, 460			
Appropriation for 1920..... 48, 460	Estimate for 1921..... 46, 860			
Appropriation for 1921..... 46, 860	Estimate for 1922..... 66, 860			
NOTE.—There is an increase in this item of \$20,000, which it is proposed to use for enlarging date culture investigations.				
The date industry is fast becoming established in this country. At the present time nearly a quarter of a million dollars a year is being invested in new plantings. The industry is centered upon the culture of the Deglet Noor variety, a date of highest quality, which, however, deteriorates in storage, so that it is desirable that other varieties be established. Offshoots of an Egyptian variety, the Saidy, which improves in storage, and of the Hayany variety, a soft date suitable for home use in Arizona, have been secured and should be tested out. As the result of a bag method of ripening dates, the percentage of fancy dates of the Deglet Noor variety as grown in the Coachella Valley of California has been more than doubled and the number of pickings reduced from 12 to 2. In addition, the final curing of the fruit is greatly simplified, being accomplished by proper handling in a moist, warm chamber for only a few hours. With the new introduction of offshoots and the discovery of this bag-ripening method, it becomes essential to conduct demonstration gardens in the more promising localities in southern California, Arizona, and Texas. Of the increase requested, \$10,000 will be necessary for adding proper facilities at the Indio date garden; \$12,000 for conducting testing and demonstration gardens in the Imperial Valley of California and the Salt River Valley of Arizona, and for enlarging the capacity of the garden at Laredo, Tex., and \$3,000 for experimental work in the warm valleys of Nevada and Utah in order to determine the possibilities of commercial date culture in such localities, and certain greenhouse experiments in connection with the working out of the most satisfactory methods for rooting date offshoots.				
Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.
Salaries:		Number.	Number.	Number.
Physiologist in charge.....per annum..	\$4,500.00	1	1	1
Physiologist.....do.....	3,500.00	2	1	
Physiologist.....do.....	3,240.00	1		1
Physiologist.....do.....	2,160.00			1
Arboriculturist.....do.....	3,500.00	1	1	
Arboriculturist.....do.....	3,240.00			1
Assistant.....do.....	3,240.00		1	
Assistant.....do.....	2,520.00			1
Assistant (part time).....do.....	2,280.00	1	1	1
Assistant.....do.....	2,160.00	1	1	
Assistant.....do.....	2,040.00	4	1	1
Assistant.....do.....	1,800.00	1	1	
Assistant (part time).....do.....	1,600.00	1	1	
Assistant.....do.....	1,200.00		2	
Indexer and translator.....do.....	1,800.00	1	1	1
Indexer and translator.....do.....	1,500.00			1
Indexer and translator.....do.....	1,440.00	1	1	1
Clerk (temporary).....do.....	1,600.00			1
Clerk.....do.....	1,400.00			1
Photostat operator.....do.....	1,200.00		1	1
Agent.....do.....	1,200.00	2	2	1
Agents, translators, and collaborators—				
\$1,000 to \$1.....do.....		9	10	13
\$75.....per month.....				2
\$5 to \$4.....per diem.....		3	3	4
Wages:				
Laborer.....per annum.....	1,200.00			3
Miscellaneous temporary labor—				
\$3.75 to \$2.50.....per diem.....		3	3	3
		32	32	39
Salaries.....		\$44,028.00	\$29,053.00	\$27,282.65
Wages.....		1,225.00	1,225.00	3,084.96
OTHER OBJECTS OF EXPENDITURE.				
Stationery.....		2,810.00	1,000.00	1,376.49
Traveling expenses.....		11,700.00	10,222.00	5,977.55
Equipment and material.....		1,950.00	900.00	2,962.82
Miscellaneous items.....		5,147.00	4,460.00	12,024.16
Total.....		66,860.00	46,860.00	52,708.63

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Bureau of Plant Industry—Continued.</i>		
(80) For soil-bacteriology and plant-nutrition investigations, including the testing of samples, procured in the open market, of cultures for inoculating legumes, and if any such samples are found to be impure, nonviable, or misbranded, the results of the tests may be published, together with the names of the manufacturers and of the persons by whom the cultures were offered for sale ["\$39,060"] (<i>acts Apr. 18, 1900, vol. 31, pp. 135, 136, secs. 1-5; Aug. 24, 1912, vol. 37, pp. 506, 507, secs. 1-4; May 31, 1920, vol. 41, pp. 701, 704, sec. 1</i>) -----	\$74, 060. 00	
Appropriation for 1912..... \$26, 145	Estimate for 1913..... \$26, 145	
Appropriation for 1913..... 36, 145	Estimate for 1914..... 35, 305	
Appropriation for 1914..... 30, 000	Estimate for 1915..... 35, 000	
Appropriation for 1915..... 35, 000	Estimate for 1916..... 48, 000	
Appropriation for 1916..... 42, 000	Estimate for 1917..... 42, 000	
Appropriation for 1917..... 42, 000	Estimate for 1918..... 39, 300	
Appropriation for 1918..... 39, 300	Estimate for 1919..... 39, 300	
Appropriation for 1919..... 39, 300	Estimate for 1920..... 39, 060	
Appropriation for 1920..... 39, 060	Estimate for 1921..... 49, 060	
Appropriation for 1921..... 39, 060	Estimate for 1922..... 74, 060	

NOTE.—There is an increase in this item of \$35,000, which it is proposed to expend as follows:

(a) \$10,000 for investigating the maintenance of soil fertility through artificial control of bacteria. Through comparatively simple methods of mulching by crop rotation, partial control of the bacteria in the soil appears to be possible. On small experimental plots material increases in yield without increase in labor or fertilizer expenditures have been secured. It appears advisable to enlarge this type of experimentation in order to determine the possibility of the practical application of the method.

(b) \$25,000 for investigating the relation of length of day to flowering and fruiting period of crop plants. It has been established that relationships between early and late maturing varieties, the comparative development of the vegetative and fruiting portions of plants through the year, the adaptation of varieties and strains to different latitudes, and other practical considerations of fundamental importance are conditioned on the prevailing length of the daylight period. Aside from the direct bearing of these principles in practical horticulture and floriculture under controlled conditions of light exposure, their application in the discovery or the production of varieties or sorts of crop plants adapted to different latitudes offers large possibilities. The facts which have been established show that the problems of the plant introducer and breeder in extending the northern or the southern range of crop plants can be very much clarified and, more important still, it is possible that means can be found whereby new adaptations may be produced through the application of properly controlled light exposures. Should this latter possibility be developed in a practical way, its importance to agriculture could hardly be overestimated. To carry out the necessary investigations requires considerable special apparatus and equipment for control of light exposure, including the use of artificial light of high intensity. An additional assistant is needed for following up phases of the work which show promise of results of immediate value. With the funds at present available the work can be carried on only in a small way, and some promising lines of study can not be undertaken at all.

Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.
Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>
Physiologist.....per annum..	\$3,760.00	1	1	1
Physiologist.....do.....	3,500.00	1	1	1
Physiologist.....do.....	3,000.00	1	1	1
Physiologist.....do.....	2,500.00	1	1	1
Physiologist.....do.....	2,460.00	1	1	2
Physiologist.....do.....	2,400.00	1	1	1
Physiologist.....do.....	2,280.00	1	1	1
Physiologist.....do.....	2,220.00	1	1	1
Physiologist.....do.....	1,920.00	1	1	1
Soil biologist.....do.....	3,000.00	1	1	1
Soil mycologist.....do.....	3,000.00	1	1	1
Soil mycologist.....do.....	2,580.00	1	1	1
Bacteriologist.....do.....	2,280.00	1	1	1
Scientific assistant.....do.....	2,040.00	1	1	1
Scientific assistant.....do.....	2,000.00	1	1	1
Scientific assistant.....do.....	1,980.00	1	1	1
Scientific assistant.....do.....	1,800.00	1	1	1
Scientific assistant.....do.....	1,740.00	1	1	1
Scientific assistant.....do.....	1,500.00	1	1	1
Chemist.....do.....	1,620.00	1	1	1

(81) For soil-fertility investigations into organic causes of infertility and remedial measures, maintenance of productivity, properties and composition of soil humus, and the transformation and formation of soil humus by soil organisms **【\$45,060】** (*acts Apr. 18, 1900, vol. 31, pp. 135, 136, secs. 1-5; Aug. 24, 1912, vol. 37, pp. 506, 507, secs. 1-4; May 31, 1920, vol. 41, pp. 701, 704, sec. 1*) ----- \$60, 060. 00

Appropriation for 1916.....	\$32, 700	Estimate for 1917.....	\$35, 200
Appropriation for 1917.....	35, 200	Estimate for 1918.....	36, 260
Appropriation for 1918.....	36, 260	Estimate for 1919.....	36, 260
Appropriation for 1919.....	36, 260	Estimate for 1920.....	35, 060
Appropriation for 1920.....	35, 060	Estimate for 1921.....	55, 060
Appropriation for 1921.....	45, 060	Estimate for 1922.....	60, 060

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
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General Expenses, Bureau of Plant Industry—Continued.

Employees.	Rates.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.
		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>
Salaries:				
Biochemist in charge..per annum.	\$4,000.00	1	1	1
Biochemist.....do.	3,240.00	1	1	1
Biochemist.....do.	3,000.00	1	1	1
Biochemist.....do.	2,880.00	1	1	1
Biochemist.....do.	2,520.00	2	2	1
Biochemist.....do.	2,400.00	1	1	1
Biochemist.....do.	2,280.00	2	2	3
Biochemist.....do.	2,160.00	1	1	1
Biochemist.....do.	2,040.00	1	1	2
Biochemist.....do.	1,980.00	1	1	1
Biochemist.....do.	1,620.00	1	1	1
Physiologist.....do.	2,220.00	1	1	1
Investigator.....do.	2,500.00	1	1	1
Investigator.....do.	2,000.00	3	3	3
Scientific assistant.....do.	1,440.00	1	1	2
Clerk (part time).....do.	1,320.00	1	1	1
Agent and collaborator—				
\$6 to \$1.....do.		1	1	1
\$8.....per diem.		1	1	1
Wages:				
Laborer (temporary)..per annum.	600.00	1	1	2
		19	15	17
Salaries.....		\$40,520.00	\$30,805.00	\$25,442.33
Wages.....		600.00		60.55
OTHER OBJECTS OF EXPENDITURE.				
Stationery.....		150.00	100.00	472.72
Traveling expenses.....		6,500.00	4,000.00	4,419.82
Equipment and material.....		5,000.00	3,500.00	1,202.17
Miscellaneous items.....		7,290.00	6,655.00	4,378.27
Total.....		60,060.00	45,060.00	35,975.86

- (82) For acclimatization and adaptation investigations of cotton, corn, and other crops introduced from tropical regions, and for the improvement of cotton and other fiber plants by cultural methods, breeding, and selection, and for determining the feasibility of increasing the production of hard fibers outside of the continental United States, **[\$101,410]** \$181,410, of which sum \$25,000 shall be immediately available; Provided, That not more than \$7,500 of this sum may be used for experiments in cottonseed interbreeding (acts Apr. 18, 1900, vol. 31, pp. 135, 136, secs. 1-5; Aug. 24, 1912, vol. 37, pp. 506, 507, secs. 1-4; May 31, 1920, vol. 41, pp. 701, 704, sec. 1).....\$181,410.00

Appropriation for 1912.....	\$34,670	Estimate for 1913.....	\$31,000
Appropriation for 1913.....	33,300	Estimate for 1914.....	43,300
Appropriation for 1914.....	38,000	Estimate for 1915.....	45,000
Appropriation for 1915.....	38,000	Estimate for 1916.....	40,580
Appropriation for 1916.....	37,580	Estimate for 1917.....	42,580
Appropriation for 1917.....	42,580	Estimate for 1918.....	42,580
Appropriation for 1918.....	82,510	Estimate for 1919.....	75,010
Appropriation for 1919.....	107,510	Estimate for 1920.....	107,510
Appropriation for 1920.....	104,410	Estimate for 1921.....	104,410
Appropriation for 1921.....	101,410	Estimate for 1922.....	181,410

NOTE.—There is an increase in this item of \$80,000, which it is planned to use as follows:

(a) \$50,000 for extending the utilization of cotton varieties developed by the department. During the past two decades the Bureau of Plant Industry has developed and established in cultivation on a commercial scale a series of new superior varieties of cotton. This series covers the entire area of cotton production, and the increase both to the producers of the better types of cotton and to the general public as a result of greater production of improved fiber now reaches millions of bales annually. Entirely new possibilities have been demonstrated under the plan of community action for producing and maintaining the seed stocks of a single superior variety in each district, as in the case of the Pima variety of Egyptian cotton in Arizona. With selection maintained in local communities organized to grow only one variety of cotton, deterioration from mixing of seed at gins and from crossing in the fields is avoided, and the varieties do not "run out." Lack of sufficient quantities of pure seed in the past has prevented any adequate or complete utilization of superior varieties of cotton. In order to facilitate the utilization of the superior strains in the regions to which adapted, by establishing the

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.					Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Bureau of Plant Industry—Continued.</i>						
<p>necessary supplies of locally selected and adjusted seed stocks, it will be necessary to extend the range of field work to new centers of community cooperation. For this purpose an increase of \$50,000 will be necessary. In view of the special need for such work in California, western Texas, and the Sea Island district of South Carolina, it is very desirable that \$25,000 of the appropriation be made immediately available, in order that the new work may be gotten under way at the beginning of the next planting season.</p> <p>(b) \$30,000 for rubber-plant investigations. The world's supply of rubber now comes largely from the Malayan Archipelago. Rubber is not produced in the United States or any of the adjacent regions of tropical America. Our complete dependence on distant countries may at any time become a national weakness in relation to our industries, and even a military danger, because rubber is required for much of the modern military equipment. The South American supply of wild rubber is likely to diminish greatly in the next few years, or even to disappear altogether, because it has become more difficult and expensive to collect wild rubber in the remote interior forests of South America than to produce cultivated rubber by the very cheap labor of the Malayan region. It is known that several rubber-producing plants can be grown in the United States, but many other species need to be investigated and tested to determine their adaptation to our conditions and their suitability for commercial production or for planting as reserve supplies for emergencies. The increase requested will enable the department to begin explorations in search of rubber-yielding plants and to conduct field experiments to determine the feasibility of rubber-substitute production in the Western Hemisphere.</p>						
Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.		
Salaries:		Number.	Number.	Number.		
Bionomist in charge.....per annum	\$4,500.00	1	1	1		
Botanist.....do.....	3,760.00	2	2			
Botanist.....do.....	3,500.00	1		1		
Botanist (temporary).....do.....	3,240.00			1		
Botanist.....do.....	3,000.00	1	1			
Botanists (temporary).....do.....	2,520.00			2		
Specialist.....do.....	3,500.00		1			
Specialist.....do.....	3,240.00			1		
Biochemist.....do.....	2,760.00	1	1			
Agriculturist.....do.....	4,000.00	1				
Agriculturist.....do.....	2,500.00	1	1	1		
Superintendent.....do.....	2,280.00			1		
Superintendent.....do.....	1,800.00	1	1	2		
Assistant.....do.....	3,000.00	1				
Assistant.....do.....	2,520.00	1	1	2		
Assistant.....do.....	2,220.00	1	1			
Assistant.....do.....	2,160.00	1	1			
Assistant.....do.....	2,040.00			1		
Assistant (temporary).....do.....	1,980.00			1		
Assistant.....do.....	1,860.00	1	1	2		
Assistant.....do.....	1,800.00	1	1	1		
Assistant.....do.....	1,680.00	1	1			
Assistant.....do.....	1,620.00	1	1	3		
Assistant.....do.....	1,500.00	2	2	1		
Assistant.....do.....	1,440.00	1	1			
Assistant (temporary).....do.....	1,260.00			1		
Assistants.....do.....	1,200.00	2	2	6		
Assistant.....do.....	1,100.00	1	1			
Assistant.....per month.....	200.00		1	1		
Agent.....per annum.....	1,667.00	1	1	1		
Agent.....do.....	1,440.00			1		
Laboratory helper.....do.....	1,440.00	1	1			
Laboratory helper.....do.....	1,080.00	1	1			
Draftsman.....do.....	1,400.00			1		
Translator.....do.....	1,200.00			1		
Laboratory aid.....do.....	1,200.00			2		
Clerks (temporary) \$1,100 to \$1,000.....do.....				4		
Specialist, clerks, messengers, laboratory aids, teamsters, and col-laborators—						
\$900 to \$1.....do.....			2	3		
\$110 to \$90.....per month.....		1	1	6		
\$10.....per diem.....				1		
\$0.65 to \$0.50.....per hour.....				2		
Wages:						
Miscellaneous temporary labor—						
\$1,080 to \$960.....per annum.....		14	2			
\$90 to \$75.....per month.....			2	10		
\$3 to \$1.....per diem.....				5		
		46	32	65		
Salaries.....		\$95,928.67	\$53,218.67	\$49,885.57		
Wages.....		2,940.00	4,200.00	3,346.10		
OBJECTS OF EXPENDITURE.						
Stationery.....	2,100.00	1,200.00	1,493.69			
Traveling expenses.....	37,840.00	17,840.00	19,194.59			
Equipment and material.....	30,100.00	10,100.00	4,749.51			
Miscellaneous items.....	12,501.33	14,851.33	13,203.94			
Total.....	181,410.00	101,410.00	91,873.40			

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
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General Expenses, Bureau of Plant Industry—Continued.

- (83) For the investigation, testing, and improvement of plants yielding drugs, spices, poisons, oils, and related products and by-products, and for general physiological and fermentation investigations **[\$39,820]** (acts Apr. 18, 1900, vol. 31, pp. 135, 136, secs. 1-5; Aug. 24, 1912, vol. 37, pp. 506, 507, secs. 1-4; May 31, 1920, vol. 41, pp. 701, 704, sec. 1). \$65, 820. 00

Appropriation for 1912.....	\$46, 930	Estimate for 1913.....	\$46, 930
Appropriation for 1913.....	49, 930	Estimate for 1914.....	58, 330
Appropriation for 1914.....	50, 000	Estimate for 1915.....	59, 380
Appropriation for 1915.....	55, 380	Estimate for 1916.....	51, 320
Appropriation for 1916.....	59, 380	Estimate for 1917.....	48, 820
Appropriation for 1917.....	53, 820	Estimate for 1918.....	58, 820
Appropriation for 1918.....	58, 820	Estimate for 1919.....	58, 820
Appropriation for 1919.....	58, 820	Estimate for 1920.....	58, 820
Appropriation for 1920.....	58, 820	Estimate for 1921.....	59, 820
Appropriation for 1921.....	39, 820	Estimate for 1922.....	65, 820

NOTE.—There is an increase in this item of \$26,000 which it is proposed to expend as follows:

(a) \$15,000 for investigations of drug and related plants. This amount is requested in order to counterbalance the reduction made by Congress in the appropriation for the current year and to offset in a measure the heavy increases in the cost of services, equipment, and supplies necessary for the conduct of the work. On account of reduced funds it has been necessary to practically abandon the two fundamental lines of work through which contact has been maintained with the actual problems of drug and oil plant production. At present the small drug garden at Arlington farm represents the extent to which field work is possible. The work looking to the determination of the economic possibilities and industrial utilization of drug plants has also had to be greatly restricted because of lack of funds. These projects should be restored to their former basis.

(b) \$1,000 for poisonous plant investigations. The funds available for technical botanical studies of poisonous plants on the western ranges, in cooperation with the stock-poisoning investigations of the Bureau of Animal Industry, have been insufficient to cover the necessary travel expenses. Furthermore, the development of cattle raising in the South is bringing up new problems with relation to poisonous plants in regions where closer grazing is being practiced. Reports of losses from this source, with requests for assistance in identifying dangerous plants and recommending methods of eradicating them, are being received in increasing numbers.

(c) \$10,000 for plant physiological investigations. This increase is desired in order to restore the allotment for physiological investigations to the amount provided last year. Reduced appropriations for the current year have made it necessary to suspend a number of important projects, which should be resumed as soon as funds can be made available.

Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.
Salaries:		Number.	Number.	Number.
Physiologist in charge.....per annum..	\$4,000.00	1	1	1
Physiologist in charge.....do.....	3,750.00	1	1	1
Physiologist.....do.....	3,500.00	1	1	1
Physiologist.....do.....	2,640.00	1	1	1
Physiologist.....do.....	2,040.00	1	1	1
Botanist.....do.....	2,400.00	1	1	1
Microchemist (temporary).....do.....	2,880.00	1	1	1
Technologist.....do.....	3,500.00	1	1	1
Technologist (temporary).....do.....	2,760.00	1	1	1
Chemist.....do.....	2,640.00	1	1	1
Chemist.....do.....	2,280.00	1	1	1
Chemist.....do.....	1,800.00	1	1	1
Chemist (temporary).....do.....	1,440.00	1	1	1
Chemist.....do.....	1,200.00	1	1	1
Biologist.....do.....	3,000.00	1	1	1
Biologist.....do.....	2,640.00	1	1	1
Biologist.....do.....	2,500.00	1	1	1
Biologist.....do.....	2,400.00	1	1	1
Biologist.....do.....	2,220.00	1	1	1
Expert.....do.....	3,000.00	1	1	1
Expert.....do.....	2,500.00	1	1	1
Expert.....do.....	2,280.00	1	1	1
Agronomist.....do.....	2,500.00	1	1	1
Assistant.....do.....	2,040.00	1	1	2
Assistant.....do.....	2,000.00	2	2	2
Assistant.....do.....	1,800.00	1	1	2
Assistant (temporary).....do.....	1,680.00	1	1	1
Assistant (temporary).....do.....	1,500.00	1	1	1
Assistant.....do.....	1,440.00	1	1	1
Assistant (temporary).....do.....	1,200.00	1	1	1

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1920.
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General Expenses, Bureau of Plant Industry—Continued.

Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.
		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>
Salaries—Continued.				
Laboratorian.....per annum..	\$1,500.00	1	1	1
Laboratory aid.....do.....	1,200.00			1
Engineer, gardener, agent, and collaborator—				
\$900 to \$12.....do.....		1	1	3
\$50 to \$1.....per month..			4	1
\$6.....per diem.....				1
Wages:				
Miscellaneous temporary labor—				
\$3 to to \$2.....per diem..		10		
		34	17	29
Salaries.....		\$45,574.00	\$28,400.00	\$44,196.27
Wages.....		1,000.00		
OTHER OBJECTS OF EXPENDITURE.				
Stationery.....		500.00	300.00	961.82
Traveling expenses.....		5,000.00	3,000.00	5,296.10
Equipment and material.....		8,000.00	5,500.00	3,183.79
Miscellaneous items.....		5,746.00	2,620.00	3,390.19
Total.....		65,820.00	39,820.00	57,028.17

- (84) For crop technological investigations, including the study of plant-infesting nematodes (*acts Apr. 18, 1900, vol. 31, pp. 135, 136, secs. 1-5; Aug. 24, 1912, vol. 37, pp. 506, 507, secs. 1-4; May 31, 1920, vol. 41, pp. 701, 704, sec. 1*) \$24,940.00

Appropriation for 1912.....	\$10,610	Estimate for 1913.....	\$10,010
Appropriation for 1913.....	10,010	Estimate for 1914.....	10,010
Appropriation for 1914.....	10,010	Estimate for 1915.....	10,010
Appropriation for 1915.....	10,010	Estimate for 1916.....	12,270
Appropriation for 1916.....	19,770	Estimate for 1917.....	25,770
Appropriation for 1917.....	25,770	Estimate for 1918.....	24,940
Appropriation for 1918.....	24,940	Estimate for 1919.....	24,940
Appropriation for 1919.....	24,940	Estimate for 1920.....	24,940
Appropriation for 1920.....	24,940	Estimate for 1921.....	24,940
Appropriation for 1921.....	24,940	Estimate for 1922.....	24,940

Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.
		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>
Salaries:				
Technologist in charge.....per annum..	\$4,260.00	1	1	
Technologist in charge.....do.....	4,000.00			1
Morphologist.....do.....	2,560.00	1		1
Technologist.....do.....	3,000.00	1		1
Nemathologist.....do.....	2,400.00	1		
Pathologist.....do.....	2,160.00	1	1	1
Assistant.....do.....	2,040.00	1	1	
Assistant.....do.....	1,800.00			1
Assistant.....do.....	1,560.00	1	1	
Assistant.....do.....	1,440.00	1		1
Assistants.....do.....	1,380.00	2	1	3
Assistant.....do.....	1,100.00	1	1	
Assistant.....do.....	1,080.00	1	1	
Clerks (temporary).....do.....	1,200.00			2
Preparators and collaborators—				
\$960 to \$1.....do.....		2	2	2
		14	9	13
Salaries.....		\$16,782.00	\$13,580.00	\$15,186.67
OTHER OBJECTS OF EXPENDITURE.				
Stationery.....		200.00	200.00	316.47
Traveling expenses.....		4,600.00	5,000.00	842.50
Equipment and material.....		1,720.00	4,000.00	4,251.87
Miscellaneous items.....		1,638.00	2,160.00	4,098.72
Total.....		24,940.00	24,940.00	24,696.23

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.		
<i>General Expenses, Bureau of Plant Industry—Continued.</i>				
(85) For studying and testing commercial seeds, including the testing of samples of seeds of grasses, clover, or alfalfa, and lawn-grass seeds secured in the open market, and where such samples are found to be adulterated or misbranded the results of the tests shall be published, together with the names of the persons by whom the seeds were offered for sale, and for carrying out the provisions of the act approved August 24, 1912, entitled "An act to regulate foreign commerce by prohibiting the admission into the United States of certain adulterated grain and seeds unfit for seeding purposes" (Thirty-seventh Statutes at Large, page 506) [\$41,680] (<i>acts Apr. 18, 1900, vol. 31, pp. 135, 136, secs. 1-5; Aug. 24, 1912, vol. 37, pp. 506, 507, secs. 1-4; May 31, 1920, vol. 41, pp. 701, 704, sec. 1</i>) -----	\$62,380.00			
Appropriation for 1912..... \$26,650	Estimate for 1913..... \$23,530			
Appropriation for 1913..... 23,530	Estimate for 1914..... 29,370			
Appropriation for 1914..... 26,000	Estimate for 1915..... 28,700			
Appropriation for 1915..... 28,700	Estimate for 1916..... 28,700			
Appropriation for 1916..... 28,700	Estimate for 1917..... 28,700			
Appropriation for 1917..... 31,700	Estimate for 1918..... 34,700			
Appropriation for 1918..... 34,700	Estimate for 1919..... 36,680			
Appropriation for 1919..... 36,680	Estimate for 1920..... 36,680			
Appropriation for 1920..... 36,680	Estimate for 1921..... 49,580			
Appropriation for 1921..... 41,680	Estimate for 1922..... 62,380			
NOTE.—An increase of \$20,700 is recommended in this item for the following purposes:				
(a) \$5,000 for purchases of commercial field seed for testing. Present funds are insufficient for the purchase of seeds required for the study of purity and viability, including the higher priced seeds such as clover and alfalfa.				
(b) \$12,000 for extending adulterated seed investigations. This work is now confined to the examination of forage crop seeds. It is proposed to enlarge the project to include vegetable seeds, and for this purpose an additional assistant in seed germination and one clerk will be necessary. It is estimated that \$9,000 of the \$12,000 increase will be required for seed purchases.				
(c) \$3,700 for enforcement of the seed importation act. The bulk of the seed imported from foreign countries comes through the port of New York. For the efficient enforcement of the seed importation act it will be necessary to station a permanent representative with an assistant at that port. At the present time the department has to depend largely upon the collector of the port for supervision of these importations, which is a very unsatisfactory arrangement.				
Employees.	Rate.	Esti- mated, 1922.	Appro- priated, 1921.	Ex- pended, 1920.
Salaries:		Number.	Number.	Number.
Botanist in charge..... per annum..	\$4,260.00	1	1	1
Botanist in charge..... do.....	3,500.00	1	1	1
Botanist..... do.....	2,500.00	1	1	1
Botanists..... do.....	2,400.00	2	2	1
Botanist..... do.....	2,280.00	1	1	1
Pathologist..... do.....	2,160.00	1	1	1
Pathologist..... do.....	2,040.00	1	1	1
Scientific assistant (temporary)..... do.....	1,920.00	1	1	1
Scientific assistants..... do.....	1,800.00	3	3	1
Scientific assistants..... do.....	1,620.00	1	1	4
Scientific assistant (part time)..... do.....	1,500.00	1	1	1
Scientific assistants..... do.....	1,440.00	3	3	3
Scientific assistant..... do.....	1,320.00	1	1	1
Scientific assistants..... do.....	1,200.00	2	2	2
Scientific assistants..... do.....	1,140.00	1	1	3
Assistants..... do.....	1,200.00	4	4	2
Clerks (temporary)..... do.....	1,200.00	1	1	2
Assistant, messenger, and col- laborators—				
\$480 to \$1..... do.....				2
\$75 to \$1..... per month..				4
\$0.60..... per hour.....				136
Wages:				
Miscellaneous temporary labor—				
\$7.20 to \$2.50..... per diem..				3
		15	18	166
Salaries.....		\$35,500.00	\$29,400.00	\$25,632.71
Wages.....				70.20
OTHER OBJECTS OF EXPENDITURE.				
Stationery.....		3,600.00	3,000.00	645.56
Traveling expenses.....		2,500.00	2,500.00	6,282.87
Equipment and material.....		500.00	500.00	875.86
Miscellaneous items.....		20,280.00	6,280.00	3,046.99
Total.....		62,380.00	41,680.00	36,554.19

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
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General Expenses, Bureau of Plant Industry—Continued.

- (86) For the investigation and improvement of cereals and methods of cereal production, and the study of cereal diseases, and for the investigation of the cultivation and breeding of flax for seed purposes, including a study of flax diseases, and for the investigation and improvement of broom corn and methods of broom-corn production, **[\$359,705] \$469,900: Provided,** That \$50,000 shall be set aside for the investigation and control of the diseases of wheat, oats, and barley, known as black rust, leaf rust, and stripe rust: *Provided also,* That \$147,200 shall be set aside for the location of and destruction of the barberry bushes and other vegetation from which such rust spores originate (*acts Apr. 18, 1900, vol. 31, pp. 135, 136, secs. 1-5; Aug. 24, 1912, vol. 37, pp. 506, 507, secs. 1-4; May 31, 1920, vol. 41, pp. 701, 704, sec. 1*) ----- **\$469, 900. 00**

Appropriation for 1912.....	\$77,925	Estimate for 1913.....	\$75,765
Appropriation for 1913.....	83,765	Estimate for 1914.....	104,925
Appropriation for 1914.....	104,925	Estimate for 1915.....	135,405
Appropriation for 1915.....	135,405	Estimate for 1916.....	134,505
Appropriation for 1916.....	142,005	Estimate for 1917.....	147,005
Appropriation for 1917.....	164,505	Estimate for 1918.....	176,505
Appropriation for 1918.....	183,505	Estimate for 1919.....	183,505
Appropriation for 1919.....	441,505	Estimate for 1920.....	432,505
Appropriation for 1920.....	452,505	Estimate for 1921.....	524,705
Appropriation for 1921.....	359,705	Estimate for 1922.....	469,900

NOTE.—An increase of \$110,195 is recommended in this item for the following purposes:

(a) \$78,000 for restoring and enlarging the cereal improvement work. The recent war-time necessity for increasing production of cereals emphasized certain shortcomings of the varieties commonly grown. For example, the lack of winter hardiness was shown by the unprecedented winter killing of wheat in the winter of 1916-17, and the need of adapted nonshattering varieties for certain regions was demonstrated. Besides the development of suitable varieties to overcome these difficulties, it is important that rust and smut resistant strains be secured, with a view to the control of these serious diseases, which when epidemic cause almost incredible losses; and that other desirable characters and qualities be established through breeding which will have great economic value under conditions existing in different parts of the country.

(b) \$32,195 for restoring and enlarging the cereal-disease investigations. Wheat scab or blight is one of the most serious cereal diseases in the central and eastern United States and during the 1919 season was unusually severe, especially in the winter-wheat regions east of the Great Plains area. From practically all the States in this territory reports were received of great reductions in yields from earlier estimates and, while climatic conditions and other diseases were partly responsible for these decreased yields, by far the greater portion of the enormous losses was unquestionably due to scab. In a large number of fields the loss was 100 per cent. Investigation to date shows that the problem is complex. At least five species of fungi are found to cause scab on wheat. Very little investigation of the disease has been possible with the limited funds available, although the opportunity for effective investigation is very favorable. Other cereal-disease projects which require further funds for their proper investigation include studies in the control of bunt of wheat in the far West through the development of resistant varieties, the loose smuts of wheat and barley, and corn smut.

Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.
Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>
Cerealist in charge.....per annum..	\$4,260.00	1	1	1
Cerealist in charge.....do.....	3,760.00	1	1	1
Cerealist (part time).....do.....	4,000.00	1	1	1
Agronomist.....do.....	3,760.00	1	1	1
Agronomist.....do.....	3,600.00	1	1	1
Agronomist.....do.....	3,240.00	2	2	2
Agronomist.....do.....	3,000.00	1	1	1
Agronomist.....do.....	2,760.00	1	1	1
Agronomist.....do.....	2,500.00	3	3	3
Agronomist.....do.....	2,400.00	1	1	1
Agronomist.....do.....	2,340.00	1	1	1
Agronomist.....do.....	2,280.00	1	1	1
Agronomist.....do.....	2,040.00	3	3	3
Pathologist.....do.....	3,600.00	2	2	2

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.					Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Bureau of Plant Industry—Continued.</i>						
Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Ex- pended, 1920.		
Salaries—Continued.		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>		
Pathologist.....per annum..	\$3,240.00			2		
Pathologist.....do.....	3,000.00			2		
Pathologist.....do.....	2,520.00	1	1	1		
Pathologist.....do.....	2,500.00	1	1			
Pathologist.....do.....	2,400.00	1	1	2		
Pathologist.....do.....	2,325.00			1		
Pathologist.....do.....	2,040.00	1	3	1		
Pathologist.....do.....	1,800.00	3	3	1		
Pathologist.....do.....	1,500.00			1		
Assistant.....do.....	2,220.00			2		
Assistant.....do.....	2,040.00	2	2	8		
Assistant.....do.....	2,000.00			2		
Assistant.....do.....	1,980.00	2	2	1		
Assistant.....do.....	1,920.00			2		
Assistant.....do.....	1,860.00	5	5	1		
Assistant.....do.....	1,800.00	18	25	27		
Assistant.....do.....	1,700.00			1		
Assistant.....do.....	1,680.00		1	2		
Assistant.....do.....	1,620.00	6	6	18		
Assistant.....do.....	1,600.00			3		
Assistant.....do.....	1,560.00			2		
Assistant.....do.....	1,500.00	59	2	47		
Assistant.....do.....	1,440.00			2		
Assistant.....do.....	1,400.00	1		1		
Assistant.....do.....	1,380.00			1		
Assistant.....do.....	1,200.00	1	4	12		
Assistant.....do.....	1,100.00	2	2	1		
Assistant.....do.....	1,080.00	1		3		
Assistant.....do.....	1,020.00			1		
Assistant.....do.....	1,000.00	1	1	1		
Assistant.....per month.....	150.00	3	3	9		
Assistant.....do.....	125.00	42	42	41		
Assistant.....do.....	120.00		2			
Assistant.....do.....	115.00	1	1			
Assistant.....do.....	100.00	21	21	26		
Physiologist.....per annum.....	3,240.00			1		
Physiologist.....do.....	3,000.00			2		
Physiologist.....do.....	2,400.00			2		
Farm superintendent.....do.....	2,520.00	1	1	1		
Farm superintendent.....do.....	2,460.00	1	1			
Farm superintendent.....do.....	2,280.00			1		
Scientific assistant.....do.....	1,800.00			1		
Scientific assistant.....do.....	1,680.00			2		
Scientific assistant.....do.....	1,620.00			3		
Scientific assistant.....do.....	1,560.00			1		
Scientific assistant.....do.....	1,500.00			1		
Agent.....do.....	3,000.00		1			
Agent.....do.....	2,760.00		1			
Agent.....do.....	2,700.00	1	1			
Agent.....do.....	1,800.00	2	2	1		
Agent.....do.....	1,680.00	1	1			
Agent.....do.....	1,650.00	1	1			
Agent.....do.....	1,620.00	1	1			
Agent.....do.....	1,500.00			1		
Agent.....do.....	1,450.00			1		
Agent.....do.....	1,440.00		1	1		
Agent.....do.....	1,380.00	1	1			
Agent.....do.....	1,320.00	1	1			
Agent.....do.....	1,200.00	1	1	3		
Agent.....do.....	1,140.00			1		
Agent.....do.....	1,100.00			1		
Agent.....do.....	1,080.00			2		
Agent.....do.....	1,020.00	2	2	1		
Agent.....do.....	1,000.00		2	3		
Clerk.....do.....	1,800.00			1		
Clerk.....do.....	1,400.00			3		
Clerk.....do.....	1,200.00			13		
Clerk.....do.....	1,100.00			7		
Teamster.....do.....	1,200.00			1		
Teamster.....per month.....	95.00			1		
Field aid.....per annum.....	1,200.00	1	1			
Field aid.....do.....	1,080.00			1		
Field aid.....do.....	1,020.00			1		
Assistants, agents, messengers, translators, collaborators, and caretakers—						
\$900 to \$1.....do.....		31	31	33		
\$80 to \$1.....per month.....		7	7	9		
\$5 to \$3.....per diem.....			1	56		
Wages:						
Firemen.....per annum.....	1,080.00			2		
Miscellaneous temporary labor—						
\$720.....do.....				1		
\$100 to \$25.....per month.....			4	9		
\$6 to \$1.50.....per diem.....		41	63	137		
\$0.50 to \$0.20.....per hour.....		39	43	105		
		325	302	542		
Salaries.....		\$242,625.00	\$187,124.00	\$278,076.60		
Wages.....		10,000.00	10,000.00	16,526.81		
OTHER OBJECTS OF EXPENDITURE.						
Stationery.....		8,000.00	8,600.00	2,774.61		
Traveling expenses.....		13,500.00	119,500.00	122,099.28		
Equipment and material.....		24,000.00	14,000.00	8,436.20		
Telephone and telegraph service.....		4,000.00	4,000.00			
Miscellaneous items.....		41,175.00	16,481.00	20,600.49		
Total.....		469,900.00	359,705.00	448,513.99		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
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General Expenses, Bureau of Plant Industry—Continued.

- (87) To enable the Secretary of Agriculture to meet the emergency caused by the existence in the United States of flag smut of wheat, take-all, helminthosporium, and other destructive soil and seed-infecting diseases of wheat and of other cereals, there is hereby appropriated, out of any moneys in the Treasury not otherwise appropriated, \$50,000, to be used in cooperation with the plant disease survey, investigation, and control authorities of the several States to prevent the further spread of and to eradicate or control these diseases (*acts Apr. 18, 1900, vol. 31, pp. 135, 136, secs. 1-5; Aug. 24, 1912, vol. 37, pp. 506, 507, secs. 1-4; May 31, 1920, vol. 41, pp. 701, 704, sec. 1*) ----- \$50,000.00

Appropriation for 1920.....	\$50,000	Estimate for 1921.....	\$50,000
Appropriation for 1921.....	50,000	Estimate for 1922.....	50,000

Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.
		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>
Salaries:				
Pathologist.....per annum	\$2,400.00			1
Pathologist.....do	2,200.00	1	1	
Pathologist.....do	1,800.00			1
Pathologist.....do	1,440.00	1	1	
Pathologist.....do	1,140.00			1
Assistant.....do	2,040.00	1	1	2
Assistant.....do	1,920.00			1
Assistant.....do	1,800.00	4	4	2
Assistant.....do	1,620.00			4
Assistant.....do	1,600.00	1	1	1
Assistant.....do	1,500.00	1	1	1
Assistant.....do	1,400.00	2	2	2
Assistant.....do	1,200.00	3	3	5
Assistant.....per month	150.00	1	1	
Assistant.....do	135.00			1
Assistant.....do	125.00			5
Assistant.....do	120.00			1
Assistant.....do	100.00			2
Agent.....per annum	1,320.00	1	1	
Agent.....do	1,000.00			1
Artist.....do	1,800.00			1
Clerk.....do	1,400.00			1
Clerk.....do	1,100.00			1
Clerk.....do	1,000.00			1
Clerks, agents, assistants, and collaborators—				
\$960 to \$1.....do		5	5	4
\$1.....per month		4	4	
\$3.50.....per diem				1
Wages:				
Miscellaneous temporary labor—				
\$100.....per month				1
\$6 to \$2.....per diem		12	12	13
\$0.30.....per hour				1
		37	37	59
Salaries.....		\$24,900.00	\$24,900.00	\$28,899.61
Wages.....		1,000.00	1,000.00	1,556.32
OTHER OBJECTS OF EXPENDITURE.				
Stationery.....	650.00		650.00	547.81
Traveling expenses.....	19,600.00		19,600.00	9,310.07
Equipment and material.....	1,300.00		1,300.00	4,444.67
Miscellaneous items.....	2,550.00		2,550.00	3,569.68
Total.....		50,000.00	50,000.00	48,328.16

- (88) For the investigation and improvement of tobacco and the methods of tobacco production and handling **[\$32,000]** ----- 41,000.00
(*same acts*) -----

Appropriation for 1912.....	\$26,630	Estimate for 1913.....	\$26,630
Appropriation for 1913.....	26,630	Estimate for 1914.....	31,630
Appropriation for 1914.....	31,630	Estimate for 1915.....	25,000
Appropriation for 1915.....	25,000	Estimate for 1916.....	27,000
Appropriation for 1916.....	25,000	Estimate for 1917.....	27,500
Appropriation for 1917.....	27,500	Estimate for 1918.....	32,000
Appropriation for 1918.....	32,000	Estimate for 1919.....	32,000
Appropriation for 1919.....	32,000	Estimate for 1920.....	32,000
Appropriation for 1920.....	32,000	Estimate for 1921.....	32,000
Appropriation for 1921.....	32,000	Estimate for 1922.....	41,000

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
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General Expenses, Bureau of Plant Industry—Continued.

NOTE.—An increase of \$9,000 is requested in this item. In recent years there has been a progressive increase in the extent of the area of "tobacco sick" soils in the Connecticut Valley, both under artificial shade and in the open fields. The yield and quality of tobacco on these diseased fields are greatly affected; frequently there is almost a total loss of the crop. In addition to the Thielavia root rot, which has been recognized for some time, it now seems certain that a second parasitic disease is present. The situation calls for aggressive action. Facilities are required for conducting systematic field tests with a view to develop methods of control, but the funds at present available barely suffice for preliminary study and observation of the nature and extent of the disease. Since this disease occurs also in other tobacco growing districts, results obtained as to methods of control would have wide application. More adequate facilities are also desired for developing root-rot resistant strains of Pennsylvania broadleaf suitable for culture in Lancaster County, Pa. Further information is also needed with reference to the cultural requirements of tobacco in the section of southern Georgia centering around Coffee County, which is fast becoming an important producing region for flue-cured tobacco.

Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.
Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>
Physiologist in charge.....per annum	\$3,760.00	1	1	1
Physiologist in charge.....do	3,500.00	1	1	1
Technologist.....do	2,720.00	1	1	1
Technologist.....do	1,800.00	1	1	1
Assistant.....do	2,000.00	1	1	1
Assistant.....do	1,950.00	1	1	1
Assistant.....do	1,920.00	1	1	1
Assistant.....do	1,800.00	1	1	1
Assistant.....do	1,620.00	1	1	1
Assistants.....do	1,500.00	2	2	2
Assistant.....do	1,380.00	1	1	1
Assistant.....do	1,260.00	1	1	1
Assistant.....per month	100.00	1	1	1
Assistant.....do	90.00	1	1	1
Draftsman.....per annum	1,400.00	1	1	1
Laboratory aid.....do	1,200.00	1	1	1
Agent.....do	1,380.00	1	1	1
Agent.....do	1,200.00	1	1	1
Agent.....do	1,000.00	1	1	1
Agent.....do	900.00	1	1	1
Collaborators.....do	1.00	2	2	2
Wages:				
Miscellaneous temporary labor—				
\$75 to \$60.....per month		4	4	3
\$3.50 to \$3.....per diem				3
		19	20	25
Salaries.....		\$24,800.00	\$23,251.00	\$22,657.33
Wages.....		2,600.00	2,600.00	3,782.90
OTHER OBJECTS OF EXPENDITURE.				
Stationery.....		100.00	100.00	239.96
Traveling expenses.....		5,000.00	1,853.00	2,807.04
Equipment and material.....		7,275.00	2,971.00	515.98
Miscellaneous items.....		1,225.00	1,225.00	1,927.84
Total.....		41,000.00	32,000.00	31,931.05

- (89) For the breeding and physiological study of alkali-resistant and drought-resistant crops (*acts Apr. 18, 1900, vol. 31, pp. 135, 136, secs. 1-5; Aug. 24, 1912, vol. 37, pp. 506, 507, secs. 1-4; May 31, 1920, vol. 41, pp. 701, 704, sec. 1*) — \$20,080.00

Appropriation for 1912.....	\$18,140	Estimate for 1913.....	\$18,140
Appropriation for 1913.....	18,140	Estimate for 1914.....	19,280
Appropriation for 1914.....	19,280	Estimate for 1915.....	22,280
Appropriation for 1915.....	22,280	Estimate for 1916.....	22,280
Appropriation for 1916.....	22,280	Estimate for 1917.....	22,280
Appropriation for 1917.....	22,280	Estimate for 1918.....	24,280
Appropriation for 1918.....	24,280	Estimate for 1919.....	24,280
Appropriation for 1919.....	24,280	Estimate for 1920.....	24,280
Appropriation for 1920.....	24,280	Estimate for 1921.....	23,080
Appropriation for 1921.....	20,080	Estimate for 1922.....	20,080

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.					Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Bureau of Plant Industry—Continued.</i>						
Employees.	Rate.	Esti- mated, 1922.	Appro- priated, 1921.	Ex- pended, 1920.		
Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>		
Physiologist in charge.....per annum..	\$3,760.00	1	1			
Physiologist in charge.....do.....	3,500.00			1		
Physiologist.....do.....	2,400.00	1	1			
Farm superintendent (temporary).....do.....	2,280.00			1		
Assistant.....do.....	1,620.00	1	1	2		
Assistant.....do.....	1,400.00			1		
Assistant.....do.....	1,260.00			1		
Assistant.....do.....	1,200.00	2	2	1		
Clerk (temporary) \$1,400 to \$1,100.....do.....				4		
Gardener (temporary).....do.....	1,200.00	1	1	1		
Map compiler.....do.....	1,100.00			1		
Teamster.....per month.....	80.00	1	1	1		
Wages:						
Miscellaneous temporary labor—						
\$100 to \$75.....per month.....		5	5	5		
\$3.50 to \$2.....per diem.....		8	7	8		
		20	19	28		
Salaries.....		\$11,340.00	\$11,340.00	\$15,298.22		
Wages.....		400.00	400.00	1,501.16		
OTHER OBJECTS OF EXPENDITURE..						
Stationery.....		500.00	500.00	560.26		
Traveling expenses.....		3,900.00	3,900.00	3,857.63		
Equipment and material.....		800.00	800.00	998.68		
Miscellaneous items.....		3,140.00	3,140.00	2,004.12		
Total.....		20,080.00	20,080.00	24,220.07		

For sugar-plant investigations, including studies of diseases and the improvement of [the beet] *sugar beets* and *sugar* beet seed, [and methods of culture, and to determine for each sugar-beet area the agricultural operations required to insure a stable agriculture, \$94,115] \$119,115: *Provided, That of this amount \$7,000 shall be immediately available for the purpose of constructing a special greenhouse for sugar cane investigations to be located on the Arlington Farm, Virginia (acts Apr. 18, 1900, vol. 31, pp. 135, 136, secs. 1-5; Aug. 24, 1912, vol. 37, pp. 506, 507, secs. 1-4; May 31, 1920, vol. 41, pp. 701, 704, sec. 1)*.....\$119, 115. 00

Appropriation for 1912.....	\$32,345	Estimate for 1913.....	\$30,795
Appropriation for 1913.....	35,795	Estimate for 1914.....	38,595
Appropriation for 1914.....	38,595	Estimate for 1915.....	31,495
Appropriation for 1915.....	31,495	Estimate for 1916.....	41,495
Appropriation for 1916.....	41,495	Estimate for 1917.....	41,495
Appropriation for 1917.....	51,495	Estimate for 1918.....	56,015
Appropriation for 1918.....	56,015	Estimate for 1919.....	64,115
Appropriation for 1919.....	64,115	Estimate for 1920.....	94,115
Appropriation for 1920.....	94,115	Estimate for 1921.....	94,115
Appropriation for 1921.....	94,115	Estimate for 1922.....	119,115

NOTE.—There is an increase in this item of \$25,000, which it is proposed to use as follows:

(a) \$20,000 for investigating sugar-cane diseases. The principal part of this increase is desired for extending the investigation of methods of controlling the mosaic disease of sugar cane, which was first noted in Porto Rico, where it has caused very heavy losses. The disease has also been found in the continental United States, and it is very important that a thorough survey be made of the sugar-cane areas to determine the extent of its distribution and that cooperation be entered into with State authorities for the establishment of control measures.

For the proper study of sugar-cane diseases it is necessary that provision be made for the erection at Arlington farm of a greenhouse of substantial construction and special design. It is estimated that this can be done at an outlay of about \$7,000. It is essential to carry on part of the experimental work at a point outside the sugar-cane area, so that it may be under control conditions and under the close personal supervision of the pathologist in charge of the investigations. The makeshift greenhouses in which the work has been conducted up to this time have been shown to be unsuitable for special work of this kind. A proviso has been inserted in the paragraph authorizing the construction of this greenhouse and making the amount for that purpose immediately available.

(b) \$5,000 for sugar-beet nematode work. The sugar-beet nematode is known to occur over considerable areas in four of the principal sugar-beet States of the West and to cause very heavy losses to growers. It is highly important that each of the sugar-beet areas in the seventeen States where this crop is grown be carefully inspected, field by field, to determine the presence of the nematode. Infested areas in these fields should be marked and mapped and the resistant rotation crops for each area

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.					Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Bureau of Plant Industry—Continued.</i>						
<p>determined until more rapid and effective methods of control can be worked out. These infested fields should be checked over from time to time to determine the effect of the rotation upon the number and activity of the nematodes. Active measures must be inaugurated in each infested area to prevent the spread of this pest to noninfested fields. Prevention of spread this year will add to sugar output for years to come. This pest is spread by various agencies from field to field. It is important, therefore, that the field survey and control work be undertaken as promptly and thoroughly as possible. With present high costs of travel and other field expenses, it will be impossible to cover more than one-third of the sugar-beet territory under present funds.</p> <p>The language of the paragraph has been amended by the insertion of the word "sugar" before "beet" in two places in the interest of accuracy. "Methods of culture" is believed to be fully covered by the term "improvement." The words "to determine for each sugar-beet area the agricultural operations required to insure a stable agriculture" were added to the agricultural appropriation act for the fiscal year 1915 and have been included in the item each succeeding year. In view of the precarious condition of the beet sugar industry at that time, field studies closely approximating farm management studies were found necessary and have been prosecuted. Important pathological and agronomic problems now require attention, and it is proposed to concentrate the entire work on those features. This has, in fact, to a large extent been the case increasingly during the past two or three years. In view of the purpose to narrow the work authorized to the type of problems which are now of greatest importance to the industry, the language enclosed in brackets should be omitted.</p>						
Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.		
Salaries:		Number.	Number.	Number.		
Pathologist in charge.....per annum..	\$3,760.00	1	1	1		
Pathologist in charge.....do.....	3,500.00			1		
Pathologist.....do.....	3,000.00	1	1			
Pathologist.....do.....	2,400.00	1	1	1		
Pathologist.....do.....	2,280.00	1	1	1		
Pathologist.....do.....	2,040.00	1	1			
Pathologist.....do.....	2,220.00	1	1			
Agronomist.....do.....	2,280.00			1		
Technologist.....do.....	2,760.00			1		
Technologist.....do.....	2,500.00	2	2	1		
Technologist.....do.....	2,280.00			1		
Plant breeder.....do.....	2,040.00	1	1	1		
Plant breeder.....do.....	1,530.00			1		
Agriculturist.....do.....	2,760.00	1	1	1		
Agriculturist.....do.....	2,500.00	1	1			
Agriculturist.....do.....	2,280.00			1		
Agriculturist.....do.....	2,160.00	1	1			
Agriculturist.....do.....	2,040.00			1		
Agriculturist.....do.....	1,920.00			1		
Agriculturist.....do.....	1,020.00		1			
Specialist.....do.....	2,280.00			1		
Assistant (temporary).....do.....	2,280.00			1		
Assistant.....do.....	2,040.00	1	1	1		
Assistant.....do.....	1,980.00	1	1			
Assistant.....do.....	1,800.00	1	1	2		
Assistant.....do.....	1,740.00			1		
Assistant.....do.....	1,620.00	1	1			
Assistant.....do.....	1,440.00	1	1	2		
Assistant.....do.....	1,200.00			2		
Assistant (temporary).....per month..	150.00	4	4	7		
Assistant (temporary).....do.....	125.00			2		
Assistant (temporary).....do.....	100.00	4	4	1		
Assistant (temporary).....do.....	85.00			1		
Agents.....per annum..	1,200.00	2	2			
Agent.....do.....	1,020.00			1		
Clerk (temporary).....do.....	1,000.00			1		
Agents, clerks, assistants, and col- laborators—						
\$90 to \$1.....per month..		12	12	17		
\$4.....per diem..				5		
\$0.80 to \$0.40.....per hour..				1		
Wages:						
Miscellaneous temporary labor—						
\$85 to \$25.....per month..		5	5	9		
\$7.15 to \$1.50.....per diem..		10	10	29		
\$0.80 to \$0.15.....per hour..		20	20	68		
		74	76	166		
Salaries.....		\$53,000.00	\$51,459.00	\$45,167.57		
Wages.....		2,100.00	2,100.00	6,901.43		
OTHER OBJECTS OF EXPENDITURE.						
Stationery.....	2,500.00	2,500.00	764.25			
Traveling expenses.....	26,850.00	25,000.00	21,824.60			
Equipment and material.....	15,000.00	8,000.00	7,235.84			
Miscellaneous items.....	12,665.00	5,056.00	10,748.81			
Construction work.....	7,000.00					
Total.....		119,115.00	94,115.00	92,642.50		

This construction work is to consist of one greenhouse on the Arlington farm containing 56,000 cubic feet, at 12½ cents per cubic foot, \$7,000.

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
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General Expenses, Bureau of Plant Industry—Continued.

- (91) For investigation, [in economic and systematic botany and the] improvement, and utilization of wild plants and grazing lands [\$22,200], and for determining the distribution of weeds and means of their control (acts Apr. 18, 1900, vol. 31, pp. 135, 136, secs. 1-5; Aug. 24, 1912, vol. 37, pp. 506, 507, secs. 1-4; May, 31, 1920, vol. 41, pp. 701, 704, sec. 1) ---- \$32, 200. 00

Appropriation for 1914.....	\$22,000	Estimate for 1915.....	\$24,000
Appropriation for 1915.....	24,000	Estimate for 1916.....	27,000
Appropriation for 1916.....	24,000	Estimate for 1917.....	24,000
Appropriation for 1917.....	24,000	Estimate for 1918.....	26,100
Appropriation for 1918.....	23,100	Estimate for 1919.....	23,100
Appropriation for 1919.....	23,100	Estimate for 1920.....	22,200
Appropriation for 1920.....	22,200	Estimate for 1921.....	22,200
Appropriation for 1921.....	22,200	Estimate for 1922.....	32,200

NOTE.—An increase of \$10,000 is requested in this item for the following purposes:

(a) \$5,000 for undertaking a systematic study of the life history of the more troublesome weeds, their range and seeding time, and methods of control. This merely represents a transfer of work from the item "Forage-crop investigations." Weeds affect all types of agriculture. It is therefore advisable to concentrate the work under the present item rather than to prosecute the studies in connection with forage-crop work, as heretofore.

(b) \$2,500 for enlarging the botanical field work carried on in connection with the systematic study of economic grasses.

(c) \$2,500 for enlarging the general systematic work in economic botany.

The language of the paragraph has been amended by the omission of the words "economic and systematic botany." The principal work under this item consists of actual field experiments looking to the improvement and domestication of such wild plants as the blueberry, improvement of wild grazing lands, etc., the botanical studies being only one phase of the general subject.

New language is inserted to provide for the prosecution under this item of work in the control of weeds, which has heretofore been conducted in connection with the appropriation for forage-crop investigations. As weeds are troublesome in practically all types of agriculture and in connection with most agricultural crops, it is believed advisable to prosecute those studies in connection with the work relating to wild plants. The stage has been reached in this work where it is important to concentrate upon the range of weeds and their seeding time and the development of methods for their control.

Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.
Salaries:		Number.	Number.	Number.
Botanist in charge.....per annum.....	\$4,500.00	1	1	1
Botanist in charge.....do.....	4,000.00	1	1	1
Botanist in charge.....do.....	3,000.00	1	1	1
Agrostologist.....do.....	3,500.00	1	1	1
Agronomist.....do.....	1,980.00	1	1	1
Assistant.....do.....	2,220.00	1	1	1
Assistant (temporary).....do.....	1,980.00	1	1	2
Assistant.....do.....	1,800.00	1	1	1
Assistant.....do.....	1,600.00	1	1	1
Assistant.....do.....	1,020.00	1	1	1
Artist (temporary).....do.....	1,200.00	1	1	1
Artist and laboratory aid—				
\$75.....per month.....				1
75 cents.....per hour.....				1
		9	8	11
Salaries.....		\$20,000.00	\$19,620.00	\$18,482.51
OTHER OBJECTS OF EXPENDITURE.				
Stationery.....		600.00	395.00	224.91
Traveling expenses.....		4,000.00	750.00	1,218.97
Equipment and material.....		3,000.00	150.00	323.04
Miscellaneous items.....		4,600.00	1,285.00	1,595.29
Total.....		32,200.00	22,200.00	21,844.72

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
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General Expenses, Bureau of Plant Industry—Continued.

(92) For the investigation and improvement of methods of crop production under subhumid, semiarid, or dry-land conditions, ~~[\$159,000]~~ \$169,000: *Provided*, That no part of this appropriation shall be used in the free distribution, or propagation for free distribution, of cuttings, seedlings, or trees of willow, box elder, ash, caragana, or other common varieties of fruit, ornamental, or shelter-belt trees in the Northern Great Plains area, except for experimental or demonstration purposes in the States of North and South Dakota west of the one-hundredth meridian, and in Montana and Wyoming east of the five-thousand-foot contour line: *Provided further*, That the limitation in this act as to the cost of farm buildings shall not apply to this paragraph (acts Apr. 18, 1900, vol. 31, pp. 135, 136, secs. 1-5; Aug. 24, 1912, vol. 37, pp. 506, 507, secs. 1-4; May 31, 1920, vol. 41, pp. 701, 704, sec. 1).....\$169,000.00

Appropriation for 1916.....	\$160,000	Estimate for 1917.....	\$160,000
Appropriation for 1917.....	160,000	Estimate for 1918.....	160,000
Appropriation for 1918.....	160,000	Estimate for 1919.....	160,000
Appropriation for 1919.....	160,000	Estimate for 1920.....	159,000
Appropriation for 1920.....	159,000	Estimate for 1921.....	169,000
Appropriation for 1921.....	159,000	Estimate for 1922.....	169,000

NOTE.—There is an increase in this item of \$10,000. This amount is necessary in order to provide an additional implement storage building at the Mandan (N. Dak.) field station, which is urgently needed; for minor structures of a similar character required at other dry land stations; and to meet the increased cost of labor and materials necessary to maintain the work at the stations on its present basis.

The language of the paragraph has been amended by inserting a proviso excluding this item from the \$1,500 limitation on the cost of farm buildings, which now applies to all the items under "General Expenses, Bureau of Plant Industry." This change will merely restore the item to the form in which it was carried in the agricultural appropriation act for the fiscal year 1919 and prior years. The present limitation of \$1,500 is too low to permit the construction of barns and other buildings of the type needed at the dry land field stations. The high price of labor and all building material further emphasizes the need for removing this limitation.

Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.
Salaries:		Number.	Number.	Number.
Agriculturist in charge.....per annum..	\$4,500.00	1	1	1
Agriculturist.....do.....	3,500.00	2	2	1
Agronomist.....do.....	2,640.00			1
Farm superintendent.....do.....	2,640.00			1
Farm superintendent.....do.....	2,500.00			
Farm superintendent.....do.....	2,280.00	1	1	1
Agent.....do.....	2,280.00	1	1	
Agent.....do.....	2,200.00			1
Agent.....do.....	1,800.00	3	3	2
Agent.....do.....	1,620.00			1
Physiologist.....do.....	2,280.00	1	1	
Physiologist.....do.....	2,100.00			1
Assistant.....do.....	3,000.00	1	1	
Assistant.....do.....	2,520.00			1
Assistant.....do.....	2,500.00	2	2	
Assistant.....do.....	2,400.00			1
Assistant.....do.....	2,280.00	10	9	1
Assistant.....do.....	2,040.00	5	5	8
Assistant.....do.....	1,800.00	1	1	2
Assistant.....do.....	1,800.00			2
Assistant.....do.....	1,680.00	2	2	1
Assistant.....do.....	1,620.00			2
Assistant.....do.....	1,600.00			1
Assistant.....do.....	1,560.00			2
Assistant.....do.....	1,500.00			1
Assistant.....do.....	1,440.00			3
Assistant (temporary).....per month..	100.00			1
Teamster.....per annum..	1,620.00			1
Clerk.....do.....	1,140.00			1
Teamster, orchardist, collaborators, clerks, caretakers, and mess cooks—				
\$900.....do.....				1
\$100 to \$1.....per month..		7	7	25
\$0.50 to \$0.30.....per hour..				3

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
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General Expenses, Bureau of Plant Industry—Continued.

Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.
Wages:				
Miscellaneous temporary labor—				
\$100 to \$25.....per month.....		46	46	118
\$7.50 to \$2.....per diem.....				114
\$1.....per hour.....				5
		83	82	304
Salaries.....		\$71,790.00	\$69,510.00	\$75,306.26
Wages.....		38,310.00	38,310.00	34,186.93
OTHER OBJECTS OF EXPENDITURE.				
Stationery.....		700.00	700.00	657.11
Traveling expenses.....		22,000.00	20,000.00	18,647.17
Equipment and material.....		13,000.00	10,000.00	10,336.73
Miscellaneous items.....		23,200.00	20,480.00	19,254.26
Total.....		169,000.00	159,000.00	158,388.46

For investigations in connection with western irrigation agriculture, the utilization of lands reclaimed under the Reclamation Act, and other areas in the arid and semiarid regions, **[\$52,380] \$94,420: Provided, That of this sum \$11,000 shall be immediately available (acts Apr. 18, 1900, vol. 31, pp. 135, 136, secs. 1-5; Aug. 24, 1912, vol. 37, pp. 506, 507, secs. 1-4; May 31, 1920, vol. 41, pp. 701, 704, sec. 1)**..... **\$94,420.00**

Appropriation for 1912.....	\$73,060	Estimate for 1913.....	\$69,600
Appropriation for 1913.....	69,600	Estimate for 1914.....	76,620
Appropriation for 1914.....	75,000	Estimate for 1915.....	70,380
Appropriation for 1915.....	70,380	Estimate for 1916.....	72,880
Appropriation for 1916.....	70,380	Estimate for 1917.....	75,380
Appropriation for 1917.....	75,380	Estimate for 1918.....	78,380
Appropriation for 1918.....	75,380	Estimate for 1919.....	73,580
Appropriation for 1919.....	73,580	Estimate for 1920.....	73,580
Appropriation for 1920.....	73,580	Estimate for 1921.....	82,380
Appropriation for 1921.....	52,380	Estimate for 1922.....	94,420

NOTE.—There is an increase in this item of \$42,040. Congress reduced this appropriation by \$20,000 at the last session. This made necessary the practical suspension of the investigational work in irrigation agriculture at the Hermiston, Oreg., San Antonio, Tex., and Fallon, Nev., field stations. It is very important that the work at these stations be continued. If the work which has been carried on at these points for a number of years is to be resumed, it will be necessary that \$3,000 be provided for the investigations at Hermiston and \$4,000 each for the work at San Antonio and Fallon, and that for the remainder of the current fiscal year these sums be made immediately available in order that the work may be started at the beginning of the next crop season.

The remainder of the increase (\$31,040) will be necessary to meet the high price of labor, travel, equipment, and materials. Because of the increased cost of maintenance, the department's experimental work on the various reclamation projects has had to be materially curtailed. Even with the additional appropriation requested it will not be possible to attempt construction work of any kind during the fiscal year 1922. This amount, however, will permit restoration of the investigations to their former status.

Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.
Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>
Agriculturist in charge.....per annum.....	\$4,260.00	1	1	
Agriculturist in charge.....do.....	4,000.00			1
Agriculturist.....do.....	2,400.00	1		
Agriculturist.....do.....	1,620.00	1		1
Farm superintendent.....do.....	2,400.00	3	2	1
Farm superintendent.....do.....	2,220.00	1	1	1
Farm superintendent.....do.....	2,040.00		1	
Farm superintendent.....do.....	1,800.00	1		1
Farm superintendent.....do.....	1,800.00		1	1
Assistant.....do.....	2,040.00			1
Assistant.....do.....	1,800.00	1	1	2
Assistant.....do.....	1,620.00			1
Assistant.....do.....	1,440.00			1
Clerk.....do.....	1,440.00	1	1	1
Clerk (temporary).....do.....	1,200.00			4

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
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General Expenses, Bureau of Plant Industry—Continued.

Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.
Salaries—Continued.		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>
Mechanic.....per month..	\$130.00	1	1	1
Teamster.....do.....	110.00			1
Teamster (temporary).....do.....	100.00			2
Teamster (temporary).....do.....	95.00			3
Teamster (temporary).....do.....	90.00			3
Teamster (temporary).....do.....	85.00			5
Teamster, collaborator, clerk, caretaker, and mess cook—				
\$1.....per annum.....				17
\$80 to \$25.....per month..		4	4	18
Wages:				
Miscellaneous and temporary labor—				
\$9.00.....per annum.....				2
\$115 to \$50.....per month..		45	45	72
\$3.25 to \$1.50.....per diem..		73	30	99
		135	108	209
Salaries.....		\$26,400.00	\$21,700.00	\$30,332.60
Wages.....		32,520.00	20,140.00	21,518.83
OTHER OBJECTS OF EXPENDITURE.				
Stationery.....		500.00	300.00	262.23
Traveling expenses.....		6,500.00	2,500.00	4,169.78
Equipment and material.....		9,150.00	5,200.00	5,087.74
Miscellaneous items.....		19,350.00	2,540.00	11,820.48
Total.....		94,420.00	52,380.00	73,191.66

- (94) For the investigation, improvement, encouragement, and determination of the adaptability to different soils and climatic conditions of pecans, almonds, Persian walnuts, black walnuts, hickory nuts, butternuts, chestnuts, filberts, and other nuts, and for methods of growing, harvesting, packing, shipping, storing, and utilizing the same **[\$20,000]** (*acts Apr. 18, 1900, vol. 31, pp. 135, 136, secs. 1-5; Aug. 24, 1912, vol. 37, pp. 506, 507, sec. 1-4; May 31, 1920, vol. 41, pp. 701, 704, sec. 1*).....

\$30,000.00

Appropriation for 1920.....	\$20,000	Estimate for 1921.....	\$20,000
Appropriation for 1921.....	20,000	Estimate for 1922.....	30,000

NOTE.—An increase in this item of \$10,000 is recommended. There is a rapidly growing interest in nut culture throughout the country and an increased appreciation of the value of nuts for food purposes. The edible nuts have had comparatively little investigation in this country with respect to their production, and many and far-reaching problems await solution before the industry will be on a satisfactory commercial basis. When the appropriation bill for 1920 was under consideration, the Senate inserted an item of \$39,000 for nut-culture investigation, and the department outlined a plan for carrying the proposed work into effect. This amount was reduced by the conferees to \$20,000. It is believed that the present situation as to the nut industry requires the expenditure of at least \$30,000 for an investigation of the varieties, cultural problems, and other features upon which information is lacking at present.

Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.
Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>
Horticulturist in charge (part time).....per annum..	\$4,500.00	1	1	1
Nut culturist.....do.....	3,000.00	1	1	
Nut culturist.....do.....	2,520.00			1
Nut culturist.....do.....	2,400.00	1	1	1
Pomologist.....do.....	2,460.00	1	1	1
Assistant (part time).....do.....	1,620.00	1	1	
Clerk (temporary).....do.....	1,200.00			1
Physiologist.....do.....	2,520.00	1		
Biochemist (part time).....do.....	3,000.00			1
Mechanical engineer.....do.....	2,520.00	1		
Wages:				
Miscellaneous temporary labor—				
\$2 to \$1.50.....per diem..				6
\$0.50.....per hour.....				2
		7	5	14
Salaries.....		\$14,760.00	\$11,040.00	\$8,235.00
Wages.....				94.25
OTHER OBJECTS OF EXPENDITURE.				
Traveling expenses.....		8,000.00	6,500.00	5,548.76
Equipment and material.....		4,000.00	1,200.00	1,784.69
Miscellaneous items.....		3,240.00	1,260.00	3,731.45
Total.....		30,000.00	27,000.00	19,394.15

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Bureau of Plant Industry—Continued.</i>		
(95) For the investigation and improvement of fruits, and the method of fruit growing, harvesting, and, in cooperation with the Bureau of Markets and Crop Estimates, studies of the behavior of fruits during the processes of marketing and while in commercial storage [\$83,200] (<i>acts Apr. 18, 1900, vol. 31, pp. 135, 136, secs. 1-5; Aug. 24, 1912, vol. 37, pp. 506, 507, secs. 1-4; May 31, 1920, vol. 41, pp. 701, 704, sec. 1</i>) -----	\$110,000. 00	
Appropriation for 1912..... \$87,735	Estimate for 1913..... \$86,015	
Appropriation for 1913..... 86,015	Estimate for 1914..... 98,595	
Appropriation for 1914..... 92,000	Estimate for 1915..... 107,500	
Appropriation for 1915..... 107,500	Estimate for 1916..... 105,060	
Appropriation for 1916..... 105,060	Estimate for 1917..... 105,060	
Appropriation for 1917..... 105,060	Estimate for 1918..... 102,200	
Appropriation for 1918..... 107,200	Estimate for 1919..... 85,280	
Appropriation for 1919..... 85,280	Estimate for 1920..... 83,200	
Appropriation for 1920..... 83,200	Estimate for 1921..... 88,200	
Appropriation for 1921..... 83,200	Estimate for 1922..... 110,000	
<p>NOTE.—There is an increase in this item of \$26,800, which it is proposed to expend as follows:</p> <p>(a) \$5,000 for grape investigations. During the past year it has been necessary to curtail very materially the work with Vinifera and American Euvitis grapes because of insufficient funds. This has resulted in the abandonment of the cooperative experiment vineyard at Vineland, N. J., where important investigations have been in progress for several years in studying the merits of different varieties for different purposes, particularly the making of unfermented juices, methods of pruning, training, fertilizing, etc. For the same reason it has been necessary to discontinue three experiment vineyards in important Vinifera grape districts in California. With the very decided increase in the cost of maintaining the four vineyards still in operation in California, it is essential that more money be available for the work than it is possible to allot from present appropriations. The Muscadine grape work in North Carolina should be extended. Additional land is needed in connection with the test of new and hybrid varieties developed by the department, and greater attention should be given to new and important methods of utilizing Muscadine grapes.</p> <p>(b) \$3,400 for fruit production investigations. The farm value of the 1919 season's crop of apples, peaches, pears, and oranges was approximately \$472,000,000. If the value of other fruits whose production problems come within the scope of this project were included, the amount would be increased many millions. During the past year the department lost the services, through resignation, of two experienced men engaged in the subtropical phases of the fruit production investigations. Because of limited funds it has not been possible to fill these vacancies and practically nothing is being done on subtropical fruit work. The same is substantially true with respect to the great deciduous fruit interests outside of California. If the increased amount is provided it is proposed to develop this work on a more adequate scale.</p> <p>(c) \$15,000 for fruit improvement investigations. Through lack of funds it was necessary to materially curtail the bud selection work with citrus fruits in California during the fiscal years 1920 and 1921. The results of the department's investigations have been of such practical importance that substantially all the citrus trees propagated in California nurseries are now grown from buds secured from parent trees of known production during a series of years. Many thousands of nonproductive citrus trees growing in the orchards also have been top-worked to productive strains. With such very great demonstrated practical value of the bud selection work, it is of the highest importance for the welfare of the fruit industry to materially extend this work. There is every reason to believe that similar advantages would result to the deciduous fruit industry should the same methods of bud selection be applied. The increased amount requested is desired for strengthening the citrus work and extending the advantages of bud selection to the deciduous fruit industry.</p> <p>(d) \$3,400 for fruit utilization investigations. This project has never been adequately financed. In view of the fact that the profitable utilization on the farm of fruits not marketable in the fresh state may often represent a very considerable proportion of the profits that are derived by the fruit grower from his season's labors, it is felt that these activities ought to be prosecuted with vigor and expanded along certain lines which are very promising. There is available at the present time almost no information of a fundamental character underlying the principles of fruit utilization on the farm. The methods and practices now used are largely empirical. Before it is possible to outline for the farmer standardized methods of procedure, it is absolutely necessary that the</p>		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.					Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Bureau of Plant Industry—Continued.</i>						
<p>fundamental principles be fully known. The investigational activities now being carried on are mainly for the purpose of determining these basic principles and also the merits of different varieties of fruits for making products of different kinds.</p> <p>The new language is made necessary by the proposed change in the name of the Bureau of Markets.</p>						
Employees.	Rate.	Esti- mated, 1922.	Appro- priated, 1921.	Ex- pended, 1920.		
Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>		
Horticulturist (part time).....per annum..	\$3,500.00	1	1	1		
Horticulturist.....do.....	2,400.00	1	1	1		
Horticulturist (part time).....do.....	2,280.00			1		
Physiologist.....do.....	4,500.00	1	1			
Physiologist.....do.....	3,500.00	1		1		
Physiologist.....do.....	3,240.00	2	2			
Physiologist.....do.....	3,000.00			2		
Physiologist.....do.....	2,520.00	2	1	1		
Physiologist (part time).....do.....	2,450.00	1	1	1		
Physiologist (part time).....do.....	2,400.00	1	1			
Botanist.....do.....	3,000.00	1	1			
Botanist.....do.....	2,760.00			1		
Pomologist (part time).....do.....	3,760.00	1	1			
Pomologist.....do.....	3,240.00			1		
Pomologist.....do.....	3,000.00	1	1			
Pomologist.....do.....	2,760.00	1	1	2		
Pomologist.....do.....	2,520.00	3		1		
Pomologist.....do.....	2,500.00	1	1			
Pomologist.....do.....	2,400.00	1	1	1		
Pomologist.....do.....	2,040.00	3				
Assistant.....do.....	2,160.00	1	1	1		
Assistant.....do.....	2,040.00	1				
Assistant.....do.....	1,920.00			1		
Assistant.....do.....	1,800.00	2	2	2		
Assistant.....do.....	1,620.00	2	2	2		
Assistant.....do.....	1,440.00	1	1			
Assistant (part time).....do.....	1,400.00			1		
Assistant.....do.....	1,200.00	1	2	3		
Orchardist.....do.....	1,620.00	1				
Artist.....do.....	1,800.00	1	1	1		
Artist.....do.....	1,200.00			1		
Superintendent.....do.....	1,800.00	1	1			
Superintendent.....do.....	1,620.00	1	1	1		
Superintendent.....do.....	1,500.00			1		
Laboratorian.....do.....	2,040.00	1	1			
Laboratorian.....do.....	1,500.00			1		
Field aid.....do.....	1,100.00			1		
Collaborators and clerks—						
\$72 to \$1.....do.....		3	3	3		
\$10 to \$1.....per month.....		1	1	1		
\$0.50.....per hour.....				2		
Wages:						
Miscellaneous temporary labor—						
\$900.....per annum.....				1		
\$35.....per month.....				1		
\$4 to \$3.....per diem.....				3		
\$0.35.....per hour.....				4		
		39	30	44		
Salaries.....		\$68,870.00	\$50,171.00	\$47,035.67		
Wages.....				959.25		
OTHER OBJECTS OF EXPENDITURE.						
Stationery.....		700.00	500.00	940.44		
Traveling expenses.....		15,000.00	12,000.00	10,768.81		
Equipment and material.....		3,750.00	2,750.00	3,289.67		
Miscellaneous items.....		21,680.00	17,779.00	19,228.07		
Total.....		110,000.00	83,200.00	82,221.91		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.		Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.	
General Expenses, Bureau of Plant Industry—Continued.				
(96) To cultivate and care for the gardens and grounds of the Department of Agriculture in the city of Washington, including the keep and lighting of the grounds and the construction, surfacing, and repairing of roadways and walks; and to erect, manage, and maintain conservatories, greenhouses, and plant and fruit propagating houses on the grounds of the Department of Agriculture in the city of Washington [\$11,690] (<i>acts Apr. 18, 1900, vol. 31, pp. 135, 136, secs. 1-5; Aug. 24, 1912, vol. 37, pp. 506, 507, sec. 1-4; May 31, 1920, vol. 41, pp. 701, 704, secs. 1</i>)		\$20, 205. 00		
Appropriation for 1912.....	\$13, 860	Estimate for 1913.....	\$13, 010	
Appropriation for 1913.....	13, 010	Estimate for 1914.....	12, 410	
Appropriation for 1914.....	11, 690	Estimate for 1915.....	11, 690	
Appropriation for 1915.....	11, 690	Estimate for 1916.....	11, 690	
Appropriation for 1916.....	11, 690	Estimate for 1917.....	11, 690	
Appropriation for 1917.....	11, 690	Estimate for 1918.....	11, 690	
Appropriation for 1918.....	11, 690	Estimate for 1919.....	11, 690	
Appropriation for 1919.....	11, 690	Estimate for 1920.....	11, 690	
Appropriation for 1920.....	11, 690	Estimate for 1921.....	11, 690	
Appropriation for 1921.....	11, 690	Estimate for 1922.....	20, 205	
NOTE.—There is an increase in this item of \$8,515. This amount will be required for resurfacing 2,620 square yards of asphalt roads in the department grounds in Washington. These roads have been repaired annually for more than 20 years and are now in such condition that patching them is no longer practicable.				
Employees.	Rate.	Esti- mated. 1922.	Appro- priated. 1921.	Ex- pended. 1920.
Salaries:		Number.	Number.	Number.
Assistant in charge..... per annum..	\$3, 000. 00	1	1	
Assistant in charge..... do.....	2, 640. 00			1
Gardener..... do.....	900. 00			1
Wages:				
Carpenter..... per diem..	6. 00			1
Miscellaneous temporary labor..... do.....	3. 00	6	6	1
		7	7	4
Salaries.....		\$3, 000. 00	\$3, 000. 00	\$1, 760. 00
Wages.....		144. 00	144. 00	216. 00
OTHER OBJECTS OF EXPENDITURE.				
Stationery.....		100. 00	100. 00	178. 59
Traveling expenses.....				27. 98
Equipment and material.....		5, 711. 00	7, 601. 00	979. 58
Miscellaneous items.....		11, 250. 00	845. 00	9, 432. 25
Total..... ¹		20, 205. 00	11, 690. 00	12, 594. 40
¹ Includes the resurfacing of 2,620 square yards of asphalt roads in the department reservation, at \$3.25 per square yard.				
(97) For horticultural investigations, including the study of producing and harvesting truck and related crops, including potatoes, and, in cooperation with the Bureau of Markets and <i>Crop Estimates</i> , studies of the behavior of vegetables while in the processes of marketing and in commercial storage, and the study of landscape and vegetable gardening, floriculture, and related subjects [\$71,940] (<i>same acts</i>)		101, 940. 00		
Appropriation for 1914.....	\$56, 320	Estimate for 1915.....	\$56, 320	
Appropriation for 1915.....	56, 320	Estimate for 1916.....	56, 080	
Appropriation for 1916.....	56, 080	Estimate for 1917.....	56, 080	
Appropriation for 1917.....	56, 080	Estimate for 1918.....	65, 240	
Appropriation for 1918.....	62, 740	Estimate for 1919.....	60, 340	
Appropriation for 1919.....	60, 340	Estimate for 1920.....	88, 340	
Appropriation for 1920.....	73, 340	Estimate for 1921.....	101, 940	
Appropriation for 1921.....	71, 940	Estimate for 1922.....	101, 940	
NOTE.—There is an increase in this item of \$30,000, which it is proposed to use as follows:				
(a) \$10,000 for studies of vegetable storage. There are important fundamental problems concerning the storage life factors of vegetables which need to be worked out with practically all vegetables com-				

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<p><i>General Expenses, Bureau of Plant Industry—Continued.</i></p> <p>monly held in cold storage. Laboratory work with celery, lettuce, cauliflower, and tomatoes has been started in a small way, with a view to determine the best storage conditions and the physiological behavior of these vegetables when stored under different conditions. These investigations should be continued and extended to other important vegetables. In addition to these studies, which are being carried on at the cold-storage laboratory at Arlington farm, field investigations with respect to certain important crops are necessary. For instance, the study of the ripening of tomatoes in Florida, which was begun about two years ago and has yielded results of very definite significance to the industry, needs to be continued in order to develop the practical application to field conditions of results worked out, in part at least, by laboratory methods. In order to accomplish this an additional technically trained assistant is necessary, with adequate funds for carrying on the field activities.</p> <p>(b) \$5,000 for Irish-potato investigations. There are a great many problems needing solution in connection with Irish-potato production, especially with regard to the improvement of seed stocks. The department now maintains field stations for conducting the work at the Aroostook farm of the Maine Experiment Station, Presque Isle, Me., at an estimated expense of \$5,000 annually, and at Greeley, Colo., and Jerome, Idaho, at an estimated expense of \$3,000 each. Other stations, conducted mostly in cooperation with State experiment stations, are located in New Jersey, Virginia, Wisconsin, Minnesota, Iowa, Washington, California, Louisiana, Texas, Oklahoma, Arkansas, and Florida. Experience has emphasized the need for closer supervision of this cooperative work than has been possible with the present personnel. To properly carry on the investigations four additional technically trained assistants should be employed and provision made for their traveling and other expenses.</p> <p>(c) \$5,000 for vegetable utilization investigations. The situation with regard to this work is not unlike that described under the fruit utilization project (see note d, under item 95). The increase requested will only partially meet this situation, but it will greatly improve the matter and provide funds urgently needed for the carrying forward of a most important and promising line of work in the drying of vegetables and in working out the fundamental principles of successful vegetable utilization. Without a definite knowledge of these fundamental principles it is impossible to develop and recommend standardized methods of procedure which will give uniform and satisfactory results when applied to farm conditions.</p> <p>(d) \$10,000 for bulb-culture investigations. The work with Dutch bulbs at Bellingham, Wash., has now reached a stage where the results should be adequately checked up and supplemented through investigations located at some point in the East. This will necessitate the provision of the requisite testing facilities somewhere along the Atlantic seaboard. It is believed that there are no fundamental reasons why as satisfactory results can not be obtained in the East as are being secured at Bellingham, and, if successful, there would be the added advantage that bulbs would be produced at a point two or three thousand miles nearer many of the great centers of use than is now the case. Furthermore, in the development of a commercial bulb-producing industry in this country, the safeguarding of the industry should be provided for through a study of the possibilities of production in various geographical sections of the country.</p> <p>Another feature of the bulb work that should be further developed is that relating to Easter lilies. Methods have been worked out at Arlington farm by which Easter lilies can be propagated from seeds and brought to the flowering stage in much less time than it requires for their propagation from bulbs, many of the plants being flowering stock vastly superior to most of the imported bulbs.</p> <p>The new language is made necessary by the proposed change in the name of the Bureau of Markets.</p>		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.					Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Bureau of Plant Industry—Continued.</i>						
Employees.	Rate.	Esti- mated, 1922.	Appro- priated, 1921.	Ex- pended, 1920.		
Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>		
Horticulturist in charge (part time).....per annum...	\$4,500.00	1	1	1		
Horticulturist.....do.....	3,760.00	1	1			
Horticulturist.....do.....	3,240.00	2	2	2		
Horticulturist (part time).....do.....	3,000.00			1		
Horticulturist.....do.....	2,500.00	1	1			
Horticulturist.....do.....	2,460.00	2	1			
Horticulturist.....do.....	2,400.00	3	3	2		
Horticulturist.....do.....	2,220.00	2	2	2		
Horticulturist.....do.....	2,040.00	1	1			
Horticulturist.....per month.....	250.00	1	1	1		
Physiologist (part time).....per annum.....	3,240.00	2	2			
Physiologist (part time).....do.....	3,000.00			2		
Physiologist (part time).....do.....	2,520.00	1	1			
Physiologist.....do.....	2,500.00	1				
Physiologist (part time).....do.....	2,400.00	1	1			
Physiologist.....do.....	2,280.00			1		
Physiologist (part time).....do.....	2,040.00	1	1			
Superintendent.....do.....	3,000.00	1				
Superintendent.....do.....	2,220.00			1		
Superintendent (temporary).....do.....	2,040.00	2	1			
Superintendent.....do.....	2,180.00			1		
Superintendent (part time).....do.....	2,160.00			1		
Superintendent (temporary).....do.....	2,040.00			1		
Superintendent.....do.....	1,860.00			1		
Superintendent (part time).....do.....	1,800.00	3	2	3		
Superintendent (part time).....do.....	1,620.00	1	1			
Superintendent.....do.....	1,440.00	1		1		
Superintendent (part time).....do.....	1,400.00			1		
Superintendent (part time).....do.....	1,200.00	2	1	1		
Field aid.....do.....	1,200.00			2		
Laboratorian (part time).....do.....	2,040.00	1	1			
Clerk (temporary) \$1,200 to \$1,080.....do.....				4		
Agent.....per month.....	120.00	1	1			
Agent (temporary).....do.....	100.00			1		
Agent and collaborator—						
\$900 to \$1.....per annum.....		4	5	1		
\$70 to \$1.....per month.....				6		
Wages:						
Miscellaneous temporary labor—						
\$1,080 to \$1.....per annum.....		2	2	4		
\$90 to \$70.....per month.....				4		
\$3.....per diem.....				1		
		38	32	44		
Salaries.....		\$56,935.00	\$47,183.00	\$40,763.95		
Wages.....				4,271.74		
OTHER OBJECTS OF EXPENDITURE.						
Stationery.....		800.00	500.00	1,052.22		
Traveling expenses.....		15,000.00	10,000.00	8,012.07		
Equipment and material.....		10,000.00	1,000.00	1,986.03		
Miscellaneous items.....		19,205.00	13,257.00	16,585.51		
Total.....		101,940.00	71,940.00	72,671.52		

- (98) For investigating, in cooperation with States or privately owned nurseries, methods of propagating fruit trees, ornamental and other plants, the study of stocks used in propagating such plants and methods of growing stocks, for the purpose of providing American sources of stocks, cuttings, or other propagating materials **[\$20,000]** (*acts Apr. 18, 1900, vol. 31, pp. 135, 136, secs. 1-5; Aug. 24, 1912, vol. 37, pp. 506, 507, secs. 1-4; May 31, 1920, vol. 41, pp. 701, 704, sec. 1*).....

\$30,000.00

Appropriation for 1921..... \$20,000 Estimate for 1921..... \$30,000
 Estimate for 1922..... 30,000

NOTE.—There is an increase in this item of \$10,000. In view of the present dependence of the American nursery and fruit industries upon foreign sources for fruit and ornamental stocks, it is urgent that provision be made for the prosecution of these stock investigations on a scale sufficiently comprehensive to yield results that will be of importance to the trade as quickly as possible. From the very nature of the case, the investigations must necessarily be continued for a relatively long period of time. It is therefore highly important that the work be launched on a scale commensurate with the conditions confronting the nursery and fruit industries of the country. In the light of experience incident to the war in reduced supplies of stocks from abroad, and also in view of

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
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General Expenses, Bureau of Plant Industry—Continued.

possible plant quarantine regulations prohibiting the importation of fruit and ornamental stocks, it is imperative that every effort be made as quickly as possible to develop American sources of supply. Lack of adequate funds now is likely to prove exceedingly expensive in results at a later time.

Employees.	Rate per annum.	Estimated, 1922.	Appropriated, 1921.	Expended, 1921. ¹
Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>
Horticulturist in charge.....	\$4,500.00	1	1	.....
Pomologist.....	3,760.00	1	1	.....
Vineyard superintendent.....	1,800.00	1	1	.....
Physiologist.....	2,500.00	1	1	.....
Assistant.....	2,040.00	1	1	.....
Assistant.....	1,800.00	1	1	.....
Assistant.....	1,200.00	1	.....	.....
Horticulturist.....	3,500.00	1	.....	.....
Horticulturist.....	2,400.00	1	1	.....
Histologist.....	2,520.00	1	.....	.....
Propagator.....	1,800.00	1	.....	.....
		11	6	.....
Salaries.....		\$12,275.00	\$5,100.00	.....
Wages.....				.....
OTHER OBJECTS OF EXPENDITURE.				
Stationery.....		150.00	200.00	.....
Traveling expenses.....		6,500.00	3,500.00	.....
Equipment and material.....		5,400.00	800.00	.....
Miscellaneous items.....		5,675.00	10,400.00	.....
Total.....		30,000.00	20,000.00	.....

¹ No appropriation.

- (99) For continuing the necessary improvements to establish and maintain a general experiment farm and agricultural station on the Arlington estate, in the State of Virginia, in accordance with the provisions of the Act of Congress approved Apr. 18, 1900 **[\$20,500]**, \$30,000: *Provided, That the limitations in this act as to the cost of farm buildings shall not apply to this paragraph (acts Apr. 18, 1900, vol. 31, pp. 135, 136, secs. 1-5; Aug. 24, 1912, vol. 37, pp. 506, 507, secs. 1-4; May 31, 1920, vol. 41, pp. 701, 704, sec. 1) —* \$30,000.00

Appropriation for 1912.....	\$38,000	Estimate for 1913.....	\$36,920
Appropriation for 1913.....	55,960	Estimate for 1914.....	55,960
Appropriation for 1914.....	15,000	Estimate for 1915.....	15,000
Appropriation for 1915.....	15,000	Estimate for 1916.....	15,000
Appropriation for 1916.....	15,000	Estimate for 1917.....	15,000
Appropriation for 1917.....	15,000	Estimate for 1918.....	21,900
Appropriation for 1918.....	21,900	Estimate for 1919.....	21,900
Appropriation for 1919.....	21,900	Estimate for 1920.....	21,900
Appropriation for 1920.....	21,900	Estimate for 1921.....	25,500
Appropriation for 1921.....	20,500	Estimate for 1922.....	30,000

NOTE.—An increase of \$9,500 is recommended in this item to meet the increased cost of labor, equipment, supplies, fuel, repairs to farm machinery, etc., and for additional facilities incident to the development of the experimental work of the several bureaus at the Arlington farm. It has become impossible with the present appropriation to do the necessary work of improving field areas suitable for experimental purposes, keeping farm buildings in repair, and obtaining such new up-to-date equipment as the experiments now in progress demand.

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
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General Expenses, Bureau of Plant Industry—Continued.

Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.
Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>
Horticulturist.....per annum.....	\$3,000.00	1	1	
Horticulturist.....do.....	2,640.00			1
Farm superintendent.....do.....	2,280.00	1	1	
Farm superintendent.....do.....	1,800.00			1
General mechanic (temporary).....do.....	1,600.00	1	1	
General mechanic.....do.....	1,400.00			1
Foreman (temporary).....do.....	1,400.00	1	1	1
Foremen (temporary).....do.....	1,200.00	2	2	2
Clerk (temporary).....do.....	1,600.00	1	1	
Clerk (temporary).....do.....	1,400.00		1	1
Clerk (temporary).....do.....	1,200.00	1	1	1
Clerk (temporary).....do.....	1,000.00			1
Wages:				
Miscellaneous temporary labor—				
\$900 to \$720.....do.....				7
\$5 to \$2.....per diem.....		13	8	92
		21	17	108
Salaries.....		\$8,730.00	\$8,730.00	\$12,443.67
Wages.....		4,541.00	3,295.00	3,505.39
OTHER OBJECTS OF EXPENDITURE.				
Stationery.....		152.00	200.00	127.23
Traveling expenses.....				20.27
Equipment and materials.....		4,558.00	3,000.00	1,543.63
Miscellaneous items.....		12,019.00	5,275.00	4,259.81
Total.....		30,000.00	20,500.00	21,900.00

- (100) For investigations in foreign seed and plant introduction, including the study, collection, purchase, testing, propagation, and distribution of rare and valuable seeds, bulbs, trees, shrubs, vines, cuttings, and plants from foreign countries and from our possessions, and for experiments with reference to their introduction and cultivation in this country **[\$92,700]** (*acts Apr. 18, 1900, vol. 31, pp. 135, 136, secs. 1-5; Aug. 24, 1912, vol. 37, pp. 506, 507, secs. 1-4; May 31, 1920, vol. 41, pp. 701, 704, sec. 1*).....\$173,800.00

Appropriation for 1914.....	\$83,000	Estimate for 1915.....	\$81,000
Appropriation for 1915.....	74,600	Estimate for 1916.....	75,400
Appropriation for 1916.....	70,400	Estimate for 1917.....	70,400
Appropriation for 1917.....	70,400	Estimate for 1918.....	93,040
Appropriation for 1918.....	93,040	Estimate for 1919.....	91,440
Appropriation for 1919.....	91,440	Estimate for 1920.....	82,700
Appropriation for 1920.....	132,700	Estimate for 1921.....	114,200
Appropriation for 1921.....	92,700	Estimate for 1922.....	173,800

NOTE.—There is an increase in this item of \$81,100, which it is proposed to expend as follows:

(a) \$12,660 for the Chico (Calif.) plant-introduction field station. The area of this station, formerly 80 acres, was increased during the fiscal year 1918 by the purchase of about 130 additional acres of land, but no increase in funds was provided for the improvement and development of this new tract, including leveling, construction of roadways and ditches, and preparation of the ground for propagating plants. This lack of funds has prevented the undertaking of a number of important lines of investigational work with new plant introductions of large potential possibilities. Additional assistants are needed to care for the increased acreage and to supervise the new plantings, and provision should be made for increased labor charges and for the advance in the cost of all materials.

(b) \$18,500 for the Bell (Md.) plant introduction field station. The proximity of this station to Washington will make it one of the most important, if not the most important, of the plant-introduction stations of the department. All plant material from foreign countries concerning which there is any question as to freedom from disease or insect pests will be handled there. The work to be carried on at the Bell station is far-reaching in character and of very great importance to the country at large. The increase recommended will provide for the necessary labor, fuel, electric power, construction and care of roads and walks, purchase of farm implements and horses, and general maintenance.

(c) \$12,940 for the Buena Vista (Fla.) plant-introduction field station. The department's experiments with semitropical fruits, such as the avocado, mango, etc., are now concentrated at Miami, Fla. The present garden of 5 acres has been operated under lease, which will expire at a comparatively early date, and as it is already filled with valuable plant introductions it can not be developed to accommodate the additional work demanded. It is therefore desirable to transfer the plants as rapidly as possible to the 25-acre tract at Buena Vista, Fla., near Miami. The increased funds are required for the purchase of necessary equipment at Buena Vista and to provide for additional labor and for maintenance.

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.					Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Bureau of Plant Industry—Continued.</i>						
<p>(d) \$10,000 for the Bellingham (Wash.) plant-introduction field station. The climatic and soil conditions of the Bellingham region are especially well adapted for the propagation and testing of many new introductions. It is also planned to carry on at this station extensive experiments to determine the possibility and practicability of the commercial production of nursery stocks. Additional funds are needed for clearing and grading the land and for general development work, as well as for the erection of a greenhouse, potting shed, lath house, and frames, and the installation of an irrigation system.</p> <p>(e) \$5,000 for the Savannah (Ga.) plant-introduction field station. This increase is desired for the development of experimental work with bamboo, which has great possibilities as a food, forage, and timber plant. Prior to the war more than \$2,000,000 worth of bamboo canes for making fishing poles were imported annually into this country. Bamboo is extensively used in construction work and for the making of furniture in the Orient and to some extent for the latter purpose in this country. Bamboo shoots are an important vegetable in China and large quantities of the shoots are imported to America. Experiments with bamboo shoots grown in this country prove them to be equally as good as those produced in China. A technical assistant is needed to develop this project, and more adequate provision should be made for labor and facilities for carrying on the experimental work at this station.</p> <p>(f) \$22,000 for central Asia explorations. During the next fiscal year it is believed that explorations should be undertaken in central Asia for the purpose of securing promising grain, forage, pasture, windbreak, and hardy fruit plants from the steppes of Siberia and central Asia. There are no other regions so likely to have plants suited to the conditions of our Northwest. The amount estimated will cover the expenses of such an expedition and provide the necessary personnel and equipment.</p>						
Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.		
Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>		
Agricultural explorer in charge . per annum	\$4,500.00	1	1	1		
Agricultural explorer	3,500.00	2				
Agricultural explorer	3,000.00	1	1			
Agricultural explorer	2,520.00	1	1	1		
Agricultural explorer	2,500.00	2				
Agricultural explorer	2,400.00			1		
Pathologist	4,500.00	1	1			
Pathologist	4,000.00			1		
Plant introducer	3,500.00	1	1	1		
Plant introducer	3,240.00	1	1			
Plant introducer	2,760.00			1		
Plant introducer	2,280.00			1		
Plant propagator	1,860.00	2	2	1		
Plant propagator	1,600.00	1				
Botanist	3,500.00			1		
Botanist	2,400.00	1	1	1		
Botanist	2,280.00	1	1			
Botanist	2,100.00	1	1			
Botanist	1,860.00	1	1	1		
Superintendent	2,500.00	1	1	1		
Superintendent	2,040.00	4	4	2		
Superintendent	1,800.00			1		
Assistant	2,040.00	1	1	1		
Assistant	1,860.00	1	1			
Assistant	1,800.00	1	1			
Assistant	1,680.00			1		
Assistant	1,620.00			2		
Assistant	1,500.00	3	1	1		
Assistant	1,440.00			1		
Assistant	1,400.00	2	1	1		
Assistant	1,200.00	4	1	1		
Foreman	1,200.00	1	1			
Aid	1,200.00	3	3	2		
Aid	1,100.00	1	1	1		
Clerk	1,200.00			1		
Collaborators, field station aids and gardeners, \$900 to \$1		16	16	15		
Wages:						
Miscellaneous temporary laborers—						
\$900 to \$480		21	14	7		
\$50 to \$35 per month				11		
\$8 to \$2 per diem				28		
\$0.35 per hour				1		
		76	58	89		
Salaries		\$79,388.00	\$57,988.00	\$55,572.30		
Wages		15,570.00	9,910.00	6,715.88		
OTHER OBJECTS OF EXPENDITURE.						
Stationery		2,000.00	1,000.00	2,351.55		
Traveling expenses		15,000.00	7,000.00	8,129.73		
Equipment and material		57,210.00	4,000.00	4,753.30		
Miscellaneous items		4,532.00	12,802.00	22,333.13		
Purchase of land				10,000.00		
Construction work				131,573.61		
Total		173,800.00	92,700.00	139,429.50		

¹ This construction work consisted of the erection of 3 cottages, 2 greenhouses, 1 head house, and 1 shed at the Bell (Md.) field station.

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Bureau of Plant Industry—Continued.</i>		
(101) For the purchase, propagation, testing, and distribution of new and rare seeds; for the investigation and improvement of grasses, alfalfa, clover, and other forage crops, including the investigation of the utilization of cacti and other dry-land plants; and to conduct investigations to determine the most effective methods of eradicating weeds, \$130,000: <i>Provided</i>, That of this amount not to exceed \$56,600 may be used for the purchase and distribution of such new and rare seeds.		
Appropriation for 1914..... \$100,000	Estimate for 1915..... \$175,000	
Appropriation for 1915..... 166,500	Estimate for 1916..... 119,920	
Appropriation for 1916..... 119,920	Estimate for 1917..... 140,920	
Appropriation for 1917..... 140,920	Estimate for 1918..... 139,180	
Appropriation for 1918..... 143,180	Estimate for 1919..... 143,180	
Appropriation for 1919..... 143,180	Estimate for 1920..... 139,780	
Appropriation for 1920..... 139,780	Estimate for 1921..... 205,080	
Appropriation for 1921..... 130,000	Estimate for 1922..... 158,000	
<p>NOTE.—This paragraph has been separated into two items, which relate to entirely distinct lines of work. The language of the new and rare seed portion is unchanged, but that part relating to forage-crop investigations has been amended by the elimination of reference to investigation of cacti and other dry-land plants and the eradication of weeds. No work has been done with cactus for several years. Even if it is resumed at a later date, the language of the paragraph as amended will be sufficiently broad to cover such investigations as may be deemed desirable. The weed work has been transferred to item 91 and the language of the latter item amended to cover these studies.</p>		
(102) <i>For the investigation and improvement of grasses, alfalfa, clover, and other forage crops (submitted)</i>	\$101,400.00	
<p>NOTE.—While this appears as a new item, it merely represents a segregation of part of item 101. The amount appropriated for the forage-crop work during the current fiscal year is \$73,400. There is, therefore, an apparent increase in this item of \$28,000, but, considering the transfer of the weed-investigation item of \$5,000, to the item for economic and systematic botany (item 91), the actual increase for forage-crop work is \$33,000, which it is proposed to use as follows:</p> <p>(a) \$15,000 for pasture investigations. Pastures are the most neglected of all farm crops; yet pasturage is the only really cheap feed for farm animals. The department is conducting very modest cooperative pasture investigations with the Mississippi and Cornell experiment stations. This work needs much intensification and should be extended to other localities. Cooperative experiments with the Virginia Experiment Station have demonstrated that heavy pasturing of blue grass is better agronomically and economically than ordinary systems of light pasturing. Further experiments and demonstrations are needed to emphasize this conclusion and to help bring about its general adoption. Studies both of the establishment and maintenance of good permanent pastures in the most developed agricultural regions of the country are urgently needed. With the information derived from small plot experiments, there is every reason to believe that the economy and efficiency of pastures can be greatly increased.</p> <p>(b) \$18,000 for red clover investigations. Red-clover acreage is steadily decreasing at an alarming rate, the decrease being nearly 50 per cent between 1899 and 1909, and even greater than this more recently. Since red clover is the best crop for restoring fertility in the rotation system of the corn belt, the reduction in acreage affects adversely the yields of all the other crops involved in the rotation. The need is urgent for greatly increased investigational and redoubled extension activities to maintain and increase the clover acreage and thus avert the lessened productivity of the most important food-producing area in America. The problem should be attacked along the broadest lines. Available resources and facilities for conducting these investigations are wholly inadequate.</p>		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes and estimated amount required for each detailed object.

Total amount to be appropriated under each head of appropriation.

Amount appropriated for the current fiscal year ending June 30, 1921.

General Expenses, Bureau of Plant Industry—Continued.

Employees.	Rate	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.
Salaries:		Number.	Number.	Number.
Agrostologist in charge.....per annum	\$4,260.00	1	1	
Agrostologist.....do.	4,000.00			1
Agronomist.....do.	3,240.00	2	2	
Agronomist.....do.	3,000.00	1	1	3
Agronomist.....do.	2,500.00	3	3	
Agronomist.....do.	2,160.00	1	1	
Agronomist.....do.	2,100.00			1
Agronomist.....do.	2,000.00	1	1	1
Agronomist.....do.	1,740.00			1
Assistant.....do.	2,280.00	2	2	3
Assistant.....do.	2,040.00	1	1	3
Assistant.....do.	1,980.00	1	1	
Assistant.....do.	1,920.00	1	1	1
Assistant.....do.	1,860.00	1	1	1
Assistant.....do.	1,740.00			1
Assistant.....do.	1,680.00	1	1	2
Assistant.....do.	1,620.00	1	1	2
Assistant.....do.	1,500.00	1		
Assistant.....do.	1,440.00			1
Assistant.....do.	1,380.00	1		
Assistant.....do.	1,200.00	1		
Plant breeder and propagator.....do.	2,280.00	1	1	1
Agent.....do.	2,000.00			1
Agent.....do.	1,980.00	2	2	
Agent.....do.	1,440.00	1	1	1
Agent.....do.	1,200.00	2	2	
Agent.....do.	1,150.00			1
Agent.....per month	125.00			1
Agent.....do.	110.00			1
Agent.....do.	100.00			3
Clerk.....per annum	1,500.00			1
Clerk.....do.	1,200.00			2
Clerk.....do.	1,000.00			1
Draftsman.....do.	1,400.00	1	1	1
Field aid.....do.	1,260.00	1	1	1
Field aid.....do.	1,200.00	1	1	1
Teamster, agents, assistants and collaborators—				
\$800 to \$1.....do.		9	7	9
\$85 to \$50.....per month				2
\$4.75.....per diem				1
Wages:				
Miscellaneous temporary labor—				
\$115 to \$25.....per month		1	1	6
\$4 to \$2.....per diem		40	30	36
		79	64	91
Salaries.....	\$60,508.00		\$52,000.00	\$55,783.88
Wages.....	4,000.00		3,500.00	3,912.33
OTHER OBJECTS OF EXPENDITURE.				
Stationery.....	500.00	500.00		368.68
Traveling expenses.....	18,000.00	10,000.00		10,597.44
Equipment and material.....	9,000.00	1,500.00		1,474.51
Miscellaneous items.....	9,392.00	5,900.00		8,515.51
Total.....		101,400.00	73,400.00	80,652.35

(103) For the purchase, propagation, testing, and distribution of new and rare seeds (submitted) \$56,600.00

NOTE.—See note under item 101. There is no change in the amount for this work.

Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.
Salaries:		Number.	Number.	Number.
Assistant.....per annum	\$2,280.00			1
Superintendent of field seed distribution.....do.	2,160.00	1	1	
Field station aid.....do.	1,200.00			1
Clerk.....do.	1,200.00			1
Typists.....per month	100.00	5	3	
Wages:				
Miscellaneous temporary labor—				
\$2.....per diem		20	10	
		26	14	3
Salaries.....	\$5,160.00		\$3,960.00	\$3,240.00
Wages.....	5,160.00		2,580.00	
OTHER OBJECTS OF EXPENDITURE.				
Stationery.....	3,000.00	1,500.00		
Traveling expenses.....	1,000.00	1,000.00		577.10
Equipment and material.....	3,000.00	3,000.00		
Miscellaneous items (including seed and freight).....	39,280.00	44,560.00		53,231.08
Total.....		56,600.00	56,600.00	57,048.18

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
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General Expenses, Bureau of Plant Industry—Continued.

- (104) *For biophysical investigations in connection with the various lines of work herein authorized, \$32,500: Provided, That of this amount \$7,500 shall be immediately available (submitted)* \$32,500.00

Appropriation for 1912.....	\$16,375	Estimate for 1913.....	\$15,655
Appropriation for 1913.....	15,655	Estimate for 1914.....	23,655
Appropriation for 1914.....	20,000	Estimate for 1915.....	30,000
Appropriation for 1915.....	30,000	Estimate for 1916.....	25,000
Appropriation for 1916.....	25,000	Estimate for 1917.....	32,500
Appropriation for 1917.....	32,500	Estimate for 1918.....	32,500
Appropriation for 1918.....	32,500	Estimate for 1919.....	32,500
Appropriation for 1919.....	32,500	Estimate for 1920.....	32,500
Appropriation for 1920.....	32,500	Estimate for 1921.....	32,500
Appropriation for 1921.....		Estimate for 1922.....	32,500

NOTE.—This is not a new item in the usual sense, but merely the restoration of an item that has been carried in the appropriation bill for many years but which was eliminated at the last session of Congress. There is no change in the amount or the language of the former item other than the addition of the clause making \$7,500 immediately available. The work conducted under this item has in the past furnished the fundamental information regarding temperature, moisture, soil, air, and other physical factors in relation to plant growth, upon which improvements in agricultural practice in irrigation and dry farming have been based. It is a highly important line of investigation and should be restored to its former status, with provision for making \$7,500 immediately available to permit the inauguration of necessary experimental work with the beginning of the crop season.

Employees.	Rate.	Estimated. 1922.	Appropriated, 1921. ¹	Expended. 1920.
Salaries:				
Physicist in charge (temporary), per annum.....	\$4,000.00	Number.		Number.
Botanist in charge.....	3,240.00	1		1
Biophysicist.....	2,520.00	1		1
Assistant.....	2,040.00	1		1
Assistant (temporary).....	1,980.00			1
Assistant.....	1,620.00	1		1
Assistant.....	1,500.00			2
Assistant (temporary).....	1,400.00			1
Assistant.....	1,380.00	1		1
Assistant.....	1,200.00	1		2
Clerk (temporary).....	1,200.00			2
Clerk.....	1,100.00			1
Gardener (temporary).....	1,200.00			1
Computer.....	110.00			1
Wages:				
Miscellaneous temporary labor— \$90 to \$25.....	do.....			2
		6		19
Salaries.....		\$12,760.00		\$21,593.08
Wages.....				119.01
OTHER OBJECTS OF EXPENDITURE.				
Stationery.....		1,000.00		277.66
Traveling expenses.....		7,000.00		3,015.16
Equipment and material.....		5,000.00		3,105.97
Miscellaneous items.....		6,740.00		3,963.41
Total.....		32,500.00		32,074.29

¹ No appropriation for fiscal year 1921.

- (105) *To enable the Secretary of Agriculture to determine the purity, viability, and trueness to variety of vegetable seeds secured in the open market, and when such seeds are found to be adulterated or misbranded according to standards established by the Secretary of Agriculture, the results of the tests shall be published, together with the names of the persons by whom the seeds were offered for sale (submitted)* 25,000.00

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.

Total amount to be appropriated under each head of appropriation.

Amount appropriated for the current fiscal year ending June 30, 1921.

General Expenses, Bureau of Plant Industry—Continued.

NOTE.—This is a new item. There is evidence that the vegetable seed stocks generally available to the trade have become somewhat seriously depleted as to quality, trueness to type, and in other respects. It is evident that very great losses are sustained by farmers and vegetable growers because of this condition. Their product is not satisfactorily uniform in character, quality, time of maturity, or in other respects, and in many instances an unduly large proportion of the product is unmarketable because of its inferiority. It is believed that this condition can be very largely eliminated through the establishment of adequate purity and viability tests and the improvement of available seed stocks. Experience along the latter lines indicates very definitely the great potential possibilities of such efforts, but it also emphasizes the absolute necessity of continuous activities along the lines of standardization. This is inherent in the situation since constant selection is necessary in the case of practically all plants propagated from seeds. Furthermore, this type of selection and standardization for the purpose of maintaining the best possible seed stocks of the different varieties and strains of vegetables represents a type of work which the average seedsman and seed grower is not likely to undertake and continue.

Employees.	Rate.	Estimated, 1922.	Appropriated, 1921. ¹	Expended, 1920. ¹
Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>
Horticulturist in charge.....per annum..	\$4,500.00	1	1	1
Horticulturist.....do.....	3,500.00	1	1	1
Horticulturist.....do.....	2,520.00	1	1	1
Assistant.....do.....	1,800.00	1	1	1
Assistant.....do.....	1,200.00	1	1	1
		5		
Salaries.....		\$15,305.00		
OTHER OBJECTS OF EXPENDITURE.				
Stationery.....		100.00		
Traveling expenses.....		4,700.00		
Equipment and material.....		2,695.00		
Miscellaneous items.....		2,200.00		
Total.....		25,000.00		

¹ No appropriations for fiscal years 1920 and 1921.

- (106) For general administrative expenses connected with the above-mentioned lines of investigation, including the office of the chief of bureau, the assistant chief of bureau, the officers in charge of publications, records, supplies, and property, and for miscellaneous expenses incident thereto (*acts Apr. 18, 1900, vol. 31, pp. 135, 136, secs. 1-5; Aug. 24, 1912, vol. 37, pp. 506, 507, secs. 1-4; May 31, 1920, vol. 41, pp. 701, 704, sec. 1*).....

\$25,980.00

Appropriation for 1912.....	\$38,251	Estimate for 1913.....	\$36,530
Appropriation for 1913.....	36,530	Estimate for 1914.....	35,690
Appropriation for 1914.....	35,690	Estimate for 1915.....	32,490
Appropriation for 1915.....	32,490	Estimate for 1916.....	32,490
Appropriation for 1916.....	32,490	Estimate for 1917.....	31,020
Appropriation for 1917.....	31,020	Estimate for 1918.....	31,020
Appropriation for 1918.....	31,020	Estimate for 1919.....	31,020
Appropriation for 1919.....	31,020	Estimate for 1920.....	29,040
Appropriation for 1920.....	29,040	Estimate for 1921.....	25,980
Appropriation for 1921.....	25,980	Estimate for 1922.....	25,980

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes and estimated amount required for each detailed object.					Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Bureau of Plant Industry—Continued.</i>						
Employees.	Rate.	Esti- mated, 1922.	Appro- priated, 1921.	Ex- pended, 1920.		
Salaries:		Number.	Number.	Number.		
Physiologist and associate chief of bureau.....per annum.....	\$4,500. 00	1	1	1		
Assistant.....do.....	4,200. 00			1		
Assistant.....do.....	2,040. 00	1	1	1		
Assistant.....do.....	1,800. 00	1	1	1		
Assistant.....do.....	1,680. 00	1	1	1		
Assistant.....do.....	1,600. 00	1	1	1		
Assistant.....per diem.....	12.50			1		
Clerk.....per annum.....	1,980. 00			1		
Clerk.....do.....	1,800. 00			1		
Clerk.....do.....	1,440. 00			1		
Clerk.....do.....	1,200. 00			2		
Clerk.....do.....	1,100. 00			2		
Clerk.....per month.....	100. 00	1	1			
Laboratory aid.....per annum.....	1,200. 00			1		
Firemen.....do.....	1,080. 00			1		
Assistants and collaborators—						
\$960 to \$1.....do.....		2	2	2		
\$1.....per month.....		1	1	1		
Wages:						
Miscellaneous and temporary labor—						
\$100 to \$50.....do.....		1	1	1		
		10	10	20		
Salaries.....		\$17,500.00	\$17,500.00	\$18,307.00		
Wages.....		200.00	200.00	175.00		
OTHER OBJECTS OF EXPENDITURE.						
Stationery.....		1,600.00	1,600.00	1,756.39		
Traveling expenses.....		900.00	900.00	925.60		
Equipment and material.....		3,500.00	3,500.00	3,401.33		
Miscellaneous items.....		2,280.00	2,280.00	4,383.41		
Total.....		25,980.00	25,980.00	28,948.73		
In all, for general expenses.....					\$2,992,228.00	\$2,247,678.00
Appropriations for 1912.....	\$1,441,536	Estimates for 1913.....	\$1,438,590			
Appropriations for 1913.....	1,658,080	Estimates for 1914.....	2,099,680			
Appropriations for 1914.....	1,944,305	Estimates for 1915.....	2,237,135			
Appropriations for 1915.....	2,880,875	Estimates for 1916.....	1,573,275			
Appropriations for 1916.....	1,462,460	Estimates for 1917.....	1,571,990			
Deficiency act.....	320,000					
Appropriations for 1917.....	1,866,340	Estimates for 1918.....	1,974,730			
Appropriations for 1918.....	2,480,530	Estimates for 1919.....	2,215,698			
Appropriations for 1919.....	2,454,698	Estimates for 1920.....	2,560,438			
Appropriations for 1920.....	2,529,378	Estimates for 1921.....	2,721,158			
Appropriations for 1921.....	2,247,678	Estimates for 1922.....	2,992,228			

【Purchase and Distribution of Valuable Seeds—】

(107) **【**For purchase, propagation, testing, and congressional distribution of valuable seeds, bulbs, trees, shrubs, vines, cuttings, and plants; all necessary office fixtures and supplies, fuel, transportation, paper, twine, gum, postal cards, gas, electric current, rent outside of the District of Columbia, official traveling expenses, and all necessary material and repairs for putting up and distributing the same; for repairs, and the employment of local and special agents, clerks, assistants, and other labor required, in the city of Washington and elsewhere, \$239,416. And the Secretary of Agriculture is hereby directed to expend the said sum, as nearly as practicable, in the purchase, testing, and distribution of such valuable seeds, bulbs, shrubs, vines, cuttings, and plants, the best he can obtain at public or private sale, and such as shall be suitable for the respective localities to which the same are to be apportioned, and in which same are to be distributed as hereinafter stated, and such seeds so purchased shall include a variety of vegetable and flower seeds suitable for planting and culture in the various sections of the United States: *Provided*, That the Secretary of Agriculture, after due advertisement and on competitive bids, is authorized to award the contract for the supplying of printed packets

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<p>【Purchase and Distribution of Valuable Seeds】—Continued.</p> <p>and envelopes and the packing, assembling, and mailing of the seeds, bulbs, shrubs, vines, cuttings, and plants, or any part thereof, for a period of not more than five years nor less than one year, if by such action he can best protect the interests of the United States. An equal proportion of five-sixths of all seeds, bulbs, shrubs, vines, cuttings, and plants, shall, upon their request, after due notification by the Secretary of Agriculture, that the allotment to their respective districts is ready for distribution, be supplied to Senators, Representatives, and Delegates in Congress for distribution among their constituents, or mailed by the department upon the receipt of their addressed franks, in packages of such weight as the Secretary of Agriculture and the Postmaster General may jointly determine: <i>Provided, however,</i> That upon each envelope or wrapper containing packages of seeds the contents thereof shall be plainly indicated, and the Secretary shall not distribute to any Senator, Representative, or Delegate seeds entirely unfit for the climate and locality he represents, but shall distribute the same so that each Member may have seeds of equal value, as near as may be, and the best adapted to the locality he represents: <i>Provided also,</i> That the seeds allotted to Senators and Representatives for distribution in the districts embraced within the twenty-fifth and thirty-fourth parallels of latitude shall be ready for delivery not later than the 10th day of January: <i>Provided also,</i> That any portion of the allotments to Senators, Representatives, and Delegates in Congress remaining uncalled for on the 1st day of April shall be distributed by the Secretary of Agriculture, giving preference to those persons whose names and addresses have been furnished by Senators and Representatives in Congress and who have not before during the same season been supplied by the department: <i>And provided also,</i> That the Secretary shall report, as provided in this act, the place, quantity, and price of seeds purchased, and the date of purchase; but nothing in this paragraph shall be construed to prevent the Secretary of Agriculture from sending seeds to those who apply for the same. And the amount herein appropriated shall not be diverted or used for any other purpose but for the purchase, testing, propagation, and distribution of valuable seeds, bulbs, mulberry and other rare and valuable trees, shrubs, vines, cuttings, and plants.】</p>		
<p>Appropriation for 1912..... \$289,680</p> <p>Appropriation for 1913..... 285,680</p> <p>Appropriation for 1914..... 296,000</p> <p>Appropriation for 1915..... 257,000</p> <p>Appropriation for 1916..... 252,540</p> <p>Appropriation for 1917..... 252,540</p> <p>Appropriation for 1918..... 243,720</p> <p>Appropriation for 1919..... 242,320</p> <p>Appropriation for 1920..... 358,980</p> <p>Appropriation for 1921..... 239,416</p>	<p>Estimate for 1913..... \$285,680</p> <p>Estimate for 1914..... 263,900</p> <p>Estimate for 1915..... ..</p> <p>Estimate for 1916..... 252,540</p> <p>Estimate for 1917..... 252,540</p> <p>Estimate for 1918..... 243,720</p> <p>Estimate for 1919..... 242,320</p> <p>Estimate for 1920..... 239,320</p> <p>Estimate for 1921..... 355,980</p> <p>Estimate for 1922..... ..</p>	\$239,416.00

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.																		
<p>[Purchase and Distribution of Valuable Seeds]—Continued.</p> <p>NOTE.—The department believes that the congressional distribution of vegetable and flower seeds can be dispensed with without material detriment to the agriculture of the country. It is therefore recommended that the item be eliminated and the funds thereby saved devoted to the prosecution of urgently important investigational work on problems of crop production which will yield results of more direct practical value. Attention is called to the fact that provision is made in these estimates for the continuation of the work which the department has been conducting for a number of years under the item (No. 103) for the systematic purchase and distribution of new and rare field-crop seeds, particularly grasses, alfalfa, clover, and other forage crops, through which the more promising, hardy, drought-resistant, and otherwise desirable forage crops are being placed with individual farmers in quantities sufficient for practical field tests to determine their adaptability to the different soils and climatic conditions of the important agricultural regions of the country. This is a constructive and useful work which should be continued.</p> <p><i>Statement of clerks employed in District of Columbia under lump-fund appropriations for 30 days or more during the fiscal year ended June 30, 1920 (32 Stat., p. 303).</i></p> <p>GENERAL EXPENSES, BUREAU OF PLANT INDUSTRY.</p> <table><tr><td>4 clerks, at \$1,800 each per annum.</td><td>5 clerks, at \$1,080 each per annum.</td></tr><tr><td>2 clerks, at \$1,600 each per annum.</td><td>1 clerk, \$1,020 per annum.</td></tr><tr><td>2 clerks, at \$1,500 each per annum.</td><td>6 clerks, at \$1,000 each per annum.</td></tr><tr><td>10 clerks, at \$1,400 each per annum.</td><td>1 clerk, \$900 per annum.</td></tr><tr><td>1 clerk, \$1,320 per annum.</td><td>1 clerk, \$780 per annum.</td></tr><tr><td>41 clerks, at \$1,200 each per annum.</td><td>2 clerks, at \$4.50 each per diem.</td></tr><tr><td>15 clerks, at \$1,100 each per annum.</td><td></td></tr></table> <p>PURCHASE AND DISTRIBUTION OF VALUABLE SEEDS.</p> <table><tr><td>1 clerk, \$1,800 per annum.</td><td>3 clerks, at \$1,200 each per annum.</td></tr><tr><td>1 clerk, \$1,400 per annum.</td><td>1 clerk, \$1,020 per annum.</td></tr></table> <p>Total for Bureau of Plant Industry -----</p>	4 clerks, at \$1,800 each per annum.	5 clerks, at \$1,080 each per annum.	2 clerks, at \$1,600 each per annum.	1 clerk, \$1,020 per annum.	2 clerks, at \$1,500 each per annum.	6 clerks, at \$1,000 each per annum.	10 clerks, at \$1,400 each per annum.	1 clerk, \$900 per annum.	1 clerk, \$1,320 per annum.	1 clerk, \$780 per annum.	41 clerks, at \$1,200 each per annum.	2 clerks, at \$4.50 each per diem.	15 clerks, at \$1,100 each per annum.		1 clerk, \$1,800 per annum.	3 clerks, at \$1,200 each per annum.	1 clerk, \$1,400 per annum.	1 clerk, \$1,020 per annum.		
4 clerks, at \$1,800 each per annum.	5 clerks, at \$1,080 each per annum.																			
2 clerks, at \$1,600 each per annum.	1 clerk, \$1,020 per annum.																			
2 clerks, at \$1,500 each per annum.	6 clerks, at \$1,000 each per annum.																			
10 clerks, at \$1,400 each per annum.	1 clerk, \$900 per annum.																			
1 clerk, \$1,320 per annum.	1 clerk, \$780 per annum.																			
41 clerks, at \$1,200 each per annum.	2 clerks, at \$4.50 each per diem.																			
15 clerks, at \$1,100 each per annum.																				
1 clerk, \$1,800 per annum.	3 clerks, at \$1,200 each per annum.																			
1 clerk, \$1,400 per annum.	1 clerk, \$1,020 per annum.																			
	\$3, 503, 608. 00	\$3, 004, 394. 00																		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<p style="text-align: center;">FOREST SERVICE.</p> <p>NOTE.—A revised statutory roll is submitted for the Forest Service which contemplates a readjustment of the salaries of all administrative and clerical positions and the elimination of the specified positions of forest supervisor, deputy forest supervisor, and forest ranger. These latter employees are provided for in a special item at the end of the proposed statutory roll. This item represents a slightly modified statutory roll which is believed to be better adapted to the personnel engaged on responsible administrative and technical work, but which, at the same time, limits the number of persons that may be employed.</p> <p>The work of the Forest Service is seriously retarded through the existence of many low-salaried clerical positions on the statutory roll. Only through a complete readjustment of the roll, whereby a higher average salary is provided for each class of employees can the situation be remedied. Inability to keep lower-paid statutory positions filled, and the burden of constantly training new employees, are factors which seriously jeopardize the effective discharge of the work of the service.</p> <p>[Salaries, Forest Service—]</p> <p>(1) [One forester, who shall be chief of bureau, \$5,000; one chief of office of accounts and fiscal agent, \$2,500; one inspector of records, \$2,400; seven district fiscal agents, at \$2,120 each; one forest supervisor, \$3,240; one forest supervisor, \$2,880; eight forest supervisors, at \$2,500 each; sixteen forest supervisors, at \$2,380 each; forty-four forest supervisors, at \$2,180 each; sixty forest supervisors, at \$1,980 each; five forest supervisors, at \$1,780 each; one deputy forest supervisor, \$1,980; four deputy forest supervisors, at \$1,880 each; twenty-five deputy forest supervisors, at \$1,780 each; twenty-eight deputy forest supervisors, at \$1,680 each; fifteen deputy forest supervisors, at \$1,580 each; eleven forest rangers, at \$1,620 each; twenty-three forest rangers, at \$1,520 each; seventy-eight forest rangers, at \$1,420 each; two hundred and eighty-eight forest rangers, at \$1,320 each; five hundred and ninety forest rangers, at \$1,220 each; one clerk, \$2,100; four clerks, at \$2,000 each; nineteen clerks, at \$1,800 each; twenty-one clerks, at \$1,600 each; nine clerks, at \$1,500 each; twenty-three clerks, at \$1,400 each; nine clerks, at \$1,300 each; one hundred and thirty-eight clerks, at \$1,200 each; ninety-five clerks, at \$1,100 each; fifty-four clerks, at \$1,020 each; thirty clerks, at \$960 each; one hundred clerks, at \$900 each; two clerks, at \$840 each; one clerk, \$600; one clerk or proof reader, \$1,400; one clerk or translator, \$1,400; one compiler, \$1,800; one draftsman, \$2,000; two draftsmen or surveyors, at \$1,800 each; three draftsmen, at \$1,600 each; one clerk or compositor, \$1,600; three draftsmen or surveyors, at \$1,600 each; sixteen draftsmen or surveyors, at \$1,500 each; six draftsmen or surveyors, at \$1,400 each; two draftsmen, at \$1,500 each; nine draftsmen, at \$1,400 each; four draftsmen, at \$1,300 each; sixteen draftsmen, at \$1,200 each; two draftsmen, at \$1,100 each; three draftsmen, at \$1,020 each; one draftsman, \$1,000; one draftsman, \$960; twelve draftsmen or map colorists, at \$900 each; one draftsman or artist, \$1,200; one draftsman or negative cutter, \$1,200; one artist, \$1,600; one artist, \$1,000; one photographer, \$1,600; one photographer, \$1,400; one photographer, \$1,200; one photographer, \$1,100; one lithographer or photographer, \$1,200; one lithographer's helper, \$780; one blue printer, \$900; one blue printer, \$720; two telephone operators, at \$600 each; one machinist, \$1,260; two carpenters, at \$1,200 each; three carpenters, at \$1,000 each; one carpenter, \$960; one electrician, \$1,020; one laboratory aid and engineer, \$1,000; nine laboratory aids and engineers, at \$900 each;</p>		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
[Salaries Forest Service] —Continued.		
two laboratory aids and engineers, at \$800 each; one laboratory helper, \$720; one laboratory helper, \$600; one packer, \$1,000; one packer, \$780; four watchmen, at \$840 each; two messengers or laborers, at \$960 each; three messengers or laborers, at \$900 each; four messengers or laborers, at \$840 each; three messengers or laborers, at \$780 each; five messengers or laborers, at \$720 each; six messengers or laborers, at \$660 each; five messenger boys, at \$600 each; two messenger boys, at \$540 each; three messenger boys, at \$480 each; three messenger boys, at \$420 each; thirteen messenger boys, at \$360 each; one charwoman, \$540; one charwoman, \$480; one charwoman, \$300; eleven charwomen, at \$240 each.]		
NOTE.—It is proposed to substitute a revised statutory roll for the above places. See general introductory note preceding item 1. This recommendation affects all of the places on the present statutory roll. The 1,198 forest supervisor, deputy forest supervisor, and forest ranger positions, carried on the present statutory roll, with salaries aggregating \$1,676,060, are provided for at the end of the proposed new statutory roll, (see item 60); 4 watchmen at \$840 each are transferred to the statutory roll of the Secretary's Office, and 702 administrative and clerical positions, with salaries aggregating \$788,960, are provided for in items 2 to 59.		
<i>Salaries, Forest Service—</i>		
(2) One forester, who shall be chief of bureau (increase of \$2,500) (<i>R. S., p. 87, secs. 520-523; acts Mar. 2, 1901, vol. 31, p. 929, sec. 1; May 31, 1920, vol. 41, pp. 705, 706, sec. 1</i>).....	\$7, 500. 00	
NOTE.—An increase of \$2,500 in the salary of the forester is recommended. See note under item 1, page 19.		
(3) One chief of accounts and fiscal agent.....	2, 500. 00	
NOTE.—The places included in items 3 to 59, affecting 725 administrative and clerical employees, aggregating \$1,071,960, show an increase of \$284,640, but of this increase \$38,440 covers the transfer of 30 places (with increases in some cases totaling \$6,680) from the several lump-fund items, without a corresponding reduction therein. See general introductory note preceding item 1.		
(4) One inspector of records or clerk.....	2, 400. 00	
(5) Seven district fiscal agents, at \$2,120 each.....	14, 840. 00	
(6) Nineteen clerks, at \$2,100 each.....	39, 900. 00	
(7) Seven clerks, at \$1,980 each.....	13, 860. 00	
(8) Thirteen clerks, at \$1,920 each.....	24, 960. 00	
(9) Twenty-eight clerks, at \$1,800 each.....	50, 400. 00	
(10) Eight clerks, at \$1,680 each.....	13, 440. 00	
(11) Eighty-one clerks, at \$1,620 each.....	131, 220. 00	
(12) Fifty-one clerks, at \$1,560 each.....	79, 560. 00	
(13) Eighty-two clerks, at \$1,500 each.....	123, 000. 00	
(14) Seventy-nine clerks, at \$1,440 each.....	113, 760. 00	
(15) Forty-nine clerks, at \$1,320 each.....	64, 680. 00	
(16) One hundred and thirty-six clerks, at \$1,200 each.....	163, 200. 00	
(17) Two clerks, at \$1,080 each.....	2, 160. 00	

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>Salaries, Forest Service—Continued.</i>		
(18) One compositor or clerk.....	\$1,800.00	
(19) Three draftsmen or surveyors, at \$2,100 each.....	6,300.00	
(20) Six draftsmen or surveyors, at \$1,920 each.....	11,520.00	
(21) Eighteen draftsmen or surveyors, at \$1,800 each.....	32,400.00	
(22) Fifteen draftsmen or surveyors, at \$1,680 each.....	25,200.00	
(23) Twenty-two draftsmen or surveyors, at \$1,560 each.....	34,320.00	
(24) Nineteen draftsmen or map colorists, at \$1,320 each.....	25,080.00	
(25) One artist or draftsman.....	1,800.00	
(26) One artist or draftsman.....	1,680.00	
(27) One photographer.....	2,160.00	
(28) One photographer.....	1,920.00	
(29) One photographer.....	1,680.00	
(30) Two photographers, at \$1,560 each.....	3,120.00	
(31) One map mounter.....	1,440.00	
(32) One blue printer.....	1,320.00	
(33) Two blue printers, at \$1,200 each.....	2,400.00	
(34) One photographic laboratory aid.....	1,200.00	
(35) One machinist.....	1,500.00	
(36) One electrician.....	1,500.00	
(37) Two carpenters, at \$1,500 each.....	3,000.00	
(38) Four carpenters, at \$1,200 each.....	4,800.00	
(39) Ten laboratory aids and engineers, at \$1,200 each.....	12,000.00	
(40) Two laboratory aids and engineers, at \$1,080 each.....	2,160.00	
(41) Two laboratory helpers, at \$1,080 each.....	2,160.00	
(42) One packer.....	1,200.00	
(43) One preparator.....	1,200.00	
(44) One skilled laborer.....	1,200.00	
(45) One chief messenger.....	1,200.00	
(46) Four messengers or laborers, at \$1,080 each.....	4,320.00	
(47) Three messengers or laborers, at \$960 each.....	2,880.00	
(48) Twelve messengers or laborers, at \$900 each.....	10,800.00	
(49) Eleven messengers or laborers, at \$720 each.....	7,920.00	
(50) Six messenger boys, at \$600 each.....	3,600.00	
(51) Thirteen messenger boys, at \$480 each.....	6,240.00	
(52) One telephone operator.....	900.00	

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>Salaries, Forest Service—Continued.</i>		
(53) Two telephone operators, at \$840 each.....	\$1, 680. 00	
(54) One janitor or laborer.....	1, 020. 00	
(55) Two janitors or laborers, at \$720 each.....	1, 440. 00	
(56) One charwoman.....	600. 00	
(57) One charwoman.....	480. 00	
(58) One charwoman.....	300. 00	
(59) Eleven charwomen, at \$240 each.....	2. 640. 00	
(60) For the employment of forest supervisors, deputy forest supervisors, and forest rangers, \$2,318,584: <i>Provided</i> , That there may be employed from this fund: 12 at not to exceed \$4,000 per annum, 36 at not to exceed \$3,500 per annum, 92 at not to exceed \$3,000 per annum, 73 at not to exceed \$2,500 per annum, and 1,112 at not to exceed \$2,000 per annum.....	2,318,584.00	
<p>NOTE.—This item includes 1,198 forest supervisor, deputy supervisor, and forest ranger positions, with salaries aggregating \$1,676,060, now carried on the present statutory roll, and \$125,000 covering the salaries of 127 employees transferred from the lump-fund item under general expenses for the employment of forest supervisors, deputy forest supervisors, forest rangers; and forest guards. The actual increase therefore is \$517,524.</p>		
<p>This item provides for the field administrative organization directly protecting the national forests and conducting the business thereon with the public. Distributed among 151 national forests in 24 States, Alaska, and Porto Rico, they develop during the year so many insistent needs for adjustment to meet the changing conditions in the different localities that effective conduct of the business demands greater flexibility than is afforded by the present statutory roll. The increased appropriation requested will permit an average increase in the salaries of forest supervisors of \$595, of deputy supervisors \$571, and rangers \$316. These salaries are considerably lower than those recommended by the Reclassification Commission and are regarded as conservative considering the responsibilities of these forest officers, who are now seriously underpaid, both from the standpoint of living costs and of character of work demanded. The average forest supervisor must protect and administer a million acres of public timberland and represent the Government in dealing with hundreds of local forest users. He often handles a yearly income producing business of from \$50,000 to \$150,000. A single ranger is in charge of from 100,000 to 300,000 acres of national forest land. On his skill and energy and trustworthiness to work without close supervision depend largely the protection of millions of dollars worth of public property and the honesty and efficiency with which these public resources are used. High-grade and experienced men must be had for these positions. The public interests have suffered already from the loss of many experienced field officers.</p>		
<p>During the fiscal year 1922 it may be found advisable to make changes in the numbers of men in the different classes or in the rates of pay. By having some leeway to make such changes as required by the varying nature of the work it will be possible to save money and increase efficiency of administration. In many places it is impossible to secure forest guards at existing statutory rates. These men, being appointed for short-term periods, must be secured locally, thereby assuring familiarity with the region in which they are employed. In many places satisfactory men can be secured at less than the statutory rates; in other places the prevailing wage for efficient unskilled laborers exceeds the statutory rates. To obtain satisfactory men in such regions, the approximate standard wages must be paid. If the national forests are to be satisfactorily protected and the business thereon conducted effectively, this additional latitude is imperative. With the exception of forest guards, who are short-term employees, the work of forest supervisors, deputy supervisors, and rangers is in a large measure of a technical character.</p>		
	\$3, 398, 044. 00	\$2, 468, 380. 00

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>Salaries, Forest Service—Continued.</i>		
Appropriations for 1912..... \$2,318,680	Estimates for 1913..... \$2,290,610	
Appropriations for 1913..... 2,235,760	Estimates for 1914..... 2,212,810	
Appropriations for 1914..... 2,239,560	Estimates for 1915..... 2,305,160	
Appropriations for 1915..... 2,305,160	Estimates for 1916..... 2,335,580	
Appropriations for 1916..... 2,335,580	Estimates for 1917..... 2,361,120	
Appropriations for 1917..... 2,361,320	Estimates for 1918..... 2,449,580	
Appropriations for 1918..... 2,447,800	Estimates for 1919..... 2,483,620	
Appropriations for 1919..... 2,483,620	Estimates for 1920..... 2,485,420	
Appropriations for 1920..... 2,485,660	Estimates for 1921..... 812,120	
Appropriations for 1921..... 2,468,380	Estimates for 1922..... 3,398,044	
NOTE.—Apparent increase, \$929,664; actual increase, \$804,664, as follows:		
<i>New places.</i>		
726 places (exclusive of forest supervisors, deputy forest supervisors, and forest rangers), aggregating. \$1,034,340		
<i>Transfers from lump funds, which funds have not been correspondingly reduced.</i>		
30 places, aggregating \$38,440, with increases in some cases, amounting to \$6,680..... 45,120		
<hr/> \$1,079,460		
<i>Places dropped.</i>		
702 places (exclusive of forest supervisors, deputy forest supervisors, and forest rangers), aggregating.. \$788,960		
<i>Transfers to statutory roll, Secretary's Office.</i>		
4 watchmen, at \$840 each..... \$3,360		
<hr/> 792,320		
Actual increase for clerical force..... 287,140		
<i>Transfers to item for forest supervisors, deputy forest supervisors, and forest rangers on statutory roll.</i>		
Amount recommended on statutory roll..... \$2,318,584		
1,198 places from 1921 statutory roll.... \$1,676,060		
General expense item..... 125,000		
<hr/> 1,801,060		
Actual increase for forest supervisors, deputy forest supervisors, and forest rangers..... 517,524		
<hr/> 804,664		
Total actual increase.....		
Transfer of lump fund item for employment of forest supervisors, deputy forest supervisors, and forest rangers, and forest guards, from general expenses..... 125,000		
<hr/> 929,664		
<i>General Expenses, Forest Service—</i>		
(61) To enable the Secretary of Agriculture to experiment and to make and continue investigations and report on forestry, national forests, forest fires, and lumbering, but no part of this appropriation shall be used for any experiment or test made outside the jurisdiction of the United States; to advise the owners of woodlands as to the proper care of the same; to investigate and test American timber and timber trees and their uses, and methods for the preservative treatment of timber; to seek, through investigations and the planting of native and foreign species, suitable trees for the treeless regions; to erect necessary buildings: <i>Provided</i> , That the cost of any building <i>purchased</i> , erected or as improved shall not exceed \$1,000; to pay all expenses necessary to protect, administer, and improve the national forests, including tree planting in the forest reserves to prevent erosion, drift, surface wash, and soil waste and the formation of floods, and including the payment of rewards under regulations of the Secretary of Agriculture for information leading to the arrest and conviction for violation of the laws and regulations relating to fires in or near national forests, or for the unlawful taking of, or injury to, Government property; to ascertain the natural conditions upon and utilize the national forests; and the Secretary of Agriculture may, in his discretion, permit timber and other		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.	
<i>General Expenses, Forest Service—Continued.</i>			
forest products cut or removed from the national forests to be exported from the State or Territory in which said forests are respectively situated; to transport and care for fish and game supplied to stock the national forests or the waters therein; to employ agents, clerks, assistants, and other labor required in practical forestry and in the administration of national forests in the city of Washington and elsewhere; to collate, digest, report, and illustrate the results of experiments and investigations made by the Forest Service; to purchase necessary supplies, apparatus, office fixtures, law books, and technical books and technical journals for officers of the Forest Service stationed outside of Washington, and for medical supplies and services and other assistance necessary for immediate relief of artisans, laborers, and other employees engaged in any hazardous work under the Forest Service; to pay freight, express, telephone, and telegraph charges; for electric light and power, fuel, gas, ice, washing towels, and official traveling and other necessary expenses, including traveling expenses for legal and fiscal officers while performing Forest Service work; and for rent outside of the District of Columbia, as follows (<i>acts Mar. 3, 1899, vol. 30, p. 1095, sec. 1; June 3, 1902, vol. 32, p. 295, sec. 1; Feb. 1, 1905, vol. 33, p. 268, sec. 1; June 11, 1906, vol. 34, p. 233, sec. 1; Mar. 1, 1911, vol. 36, p. 963, sec. 1; Mar. 4, 1913, vol. 37, p. 842, sec. 1; Mar. 4, 1915, vol. 38, p. 1099, sec. 1; May 31, 1920, vol. 41, pp. 706-711, sec. 1</i>):			
NOTE.—The word "purchased" is inserted in this paragraph following the word "building" so as to permit the purchase of buildings which have been erected on national forests lands under permit or on private lands whose owners are willing to sell. In certain cases owners will donate land to the Government for administrative purposes if they can be compensated for the cost of buildings erected. Decisions of the Attorney General authorize acceptance of such donated lands. Desirable stations for the administrative personnel can thus be acquired for less than the amount it would cost the department to erect them.			
(62) [For employment of forest supervisors, deputy forest supervisors, forest rangers, and forest guards, \$125,000.]			
NOTE.—This item has been transferred to the item at the end of the statutory roll for the employment of forest supervisors, deputy forest supervisors, and forest rangers. See note under item 60.			
(63) For salaries and field and station expenses, including the maintenance of nurseries, collecting seed, and planting necessary for the use, maintenance, improvement, and protection of the national forests [named below:] , [\$1,620,292] (<i>same acts</i>)		\$2,320,292.00	
Appropriation for 1912.....	\$1,885,852	Estimate for 1913.....	\$1,871,377
Appropriation for 1913.....	1,901,377	Estimate for 1914.....	1,894,591
Appropriation for 1914.....	1,895,591	Estimate for 1915.....	1,888,568
Appropriation for 1915.....	1,888,568	Estimate for 1916.....	1,811,148
Appropriation for 1916.....	1,811,148	Estimate for 1917.....	1,800,508
Appropriation for 1917.....	1,800,307	Estimate for 1918.....	1,816,367
Appropriation for 1918.....	1,817,567	Estimate for 1919.....	1,803,127
Appropriation for 1919.....	1,803,127	Estimate for 1920.....	2,069,201
Appropriation for 1920.....	2,069,201	Estimate for 1921.....	4,000,627
Appropriation for 1921.....	1,620,292	Estimate for 1922.....	2,320,292
NOTE.—There is an apparent increase in this item of \$700,000, but taking into consideration the transfer of \$5,000 from the item for "Nebraska National Forest" to the lump fund for tree planting (item 74), the actual increase is \$705,000.			

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
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General Expenses, Forest Service—Continued.

This recommendation contemplates the consolidation under one item of all the individual national forests. (See item 64.) It is provided by law that within certain limitations these forest appropriations shall be available interchangeably for necessary expenditures for fire protection and other unforeseen exigencies. Under the present method of individual forest appropriations, a large amount of administrative time and book-keeping is required to keep a record of adjustments covering over 150 subappropriations. The proposed change in the form of appropriation will in no way affect the present form of administration on the individual forest units, but will make for greater economy and efficiency in handling the funds.

It is proposed to use the increase recommended (\$705,000) as follows:

(a) \$180,000 to cover increased cost of supplies, tools, travel, and forage on the forests.

(b) \$200,000 for 401 additional fire guards. The experience of the past few years has demonstrated beyond question that the force is not sufficient to provide protection from forest fires even in normal years. The season of most serious fire menace comes just at harvest time when sufficient temporary labor is difficult to obtain, with resulting disastrous forest fires.

(c) \$150,000 to provide for the increased cost of doing business on the national forests, including increased salaries that must be paid to technical men and the employment of additional short-term scalers and assistant rangers.

(d) \$175,000 for 87 new men of the forest assistant, grazing assistant, and timber scaler classes. The technical force of these grades has become hopelessly inadequate to meet the demands made upon the national forests. During the past year the receipts from timber sales increased \$496,300 over the year preceding. The cut of stumpage increased 14 per cent and new sales increased 66 per cent. The demand for national-forest timber exceeds anything known since the national forests were created. There is also a keen demand for summer home sites in the forests, which last year yielded a resource of \$149,000. Qualified men are needed to locate and survey these areas and supervise the leases. It is also essential that an immediate classification of national forest ranges be made, in considerable detail, as a basis for reappraising fees in relation to the value of the range.

Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.
<i>Salaries:</i>		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>
Inspector.....per annum..	\$3,000.00	14	14	14
Inspector.....do.....	2,880.00	1	1	1
Inspector.....do.....	2,820.00	1	1	1
Inspector.....do.....	2,520.00	16	16	16
Forest supervisor.....do.....	3,040.00	1	1	1
Forest supervisor.....do.....	2,700.00	1	1	1
Forest supervisor.....do.....	2,520.00	3	3	3
Forest supervisor.....do.....	2,400.00	3	11	2
Forest supervisor.....do.....	2,380.00	1	1	1
Forest supervisor.....do.....	2,220.00	1	1	1
Forest supervisor (temporary).....do.....	2,200.00	1	4	4
Forest supervisor.....do.....	2,180.00	4	4	4
Forest supervisor.....do.....	2,040.00	1	1	1
Forest supervisor.....do.....	2,000.00	17	17	1
Forest supervisor.....do.....	1,980.00	2	2	2
Forest supervisor.....do.....	1,800.00	12	12	3
Forest supervisor.....do.....	1,780.00	1	1	1
Deputy forest supervisor.....do.....	1,800.00	1	5	5
Deputy forest supervisor.....do.....	1,780.00	1	1	1
Deputy forest supervisor.....do.....	1,700.00	10	10	10
Deputy forest supervisor.....do.....	1,680.00	1	1	1
Deputy forest supervisor.....do.....	1,600.00	20	20	1
Deputy forest supervisor.....do.....	1,500.00	9	9	9
Examiner.....do.....	2,400.00	2	2	2
Examiner (part time).....do.....	2,040.00	1	1	1
Examiner.....do.....	2,000.00	3	3	1
Examiner.....do.....	1,980.00	2	2	2
Examiner.....do.....	1,920.00	2	2	2
Examiner.....do.....	1,800.00	30	17	5
Examiner.....do.....	1,740.00	1	1	1
Examiner.....do.....	1,700.00	8	4	2
Examiner.....do.....	1,680.00	8	8	8
Examiner.....do.....	1,620.00	6	6	4
Examine.....do.....	1,600.00	3	3	6
Examiner.....do.....	1,560.00	1	1	1
Examiner.....do.....	1,500.00	38	15	17
Examiner.....do.....	1,440.00	2	2	4
Examiner.....do.....	1,400.00	13	13	9
Examiner.....do.....	1,380.00	2	2	3
Examiner.....do.....	1,300.00	5	5	3
Examiner.....do.....	1,260.00	4	4	3
Examiner.....do.....	1,200.00	1	1	1

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.					Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Forest Service—Continued.</i>						
Employees.	Rate.	Esti- mated, 1922.	Appro- priated, 1921.	Ex- pended, 1920.		
Salaries—Continued.		Number.	Number.	Number.		
Assistant.....per annum..	\$1,800.00	6	2			
Assistant.....do.....	1,500.00	47	2			
Assistant.....do.....	1,400.00		6			
Assistant.....do.....	1,200.00		15			
Assistant.....do.....	1,100.00		16	1		
Lumberman.....do.....	1,900.00	1	1			
Lumbermen.....do.....	1,800.00	6				
Lumberman.....do.....	1,680.00		1			
Lumbermen.....do.....	1,620.00		3			
Lumberman.....do.....	1,600.00		1			
Lumbermen.....do.....	1,500.00	8	6			
Timber cruiser.....do.....	1,740.00	1	1	1		
Scaler.....do.....	1,800.00	6	2			
Scaler.....do.....	1,500.00	5	1			
Scaler.....do.....	1,440.00		1	1		
Scaler.....do.....	1,400.00	26	8	7		
Scaler.....do.....	1,380.00		1			
Scaler.....do.....	1,300.00		5	4		
Scaler.....do.....	1,200.00	91	18	4		
Scaler.....do.....	1,100.00		13	4		
Scaler (temporary).....do.....	1,080.00		11			
Scaler.....do.....	1,020.00		40	13		
Fire chief.....do.....	1,800.00	10	8			
Fire chief.....do.....	1,680.00	9	1			
Fire chief.....do.....	1,620.00		1			
Fire chief.....do.....	1,500.00	16	5			
Fire chief.....do.....	1,400.00	4	4			
Fire chief.....do.....	1,300.00		5			
Ranger.....do.....	1,500.00	10	30			
Ranger.....do.....	1,400.00	15	14	1		
Ranger.....do.....	1,300.00	60	100			
Ranger.....do.....	1,200.00	180	295	2		
Ranger.....do.....	1,100.00	90	150	1		
Guard (temporary).....do.....	1,800.00	2	2	1		
Guard (temporary).....do.....	1,500.00	408	12	2		
Guard (temporary).....do.....	1,400.00		18	1		
Guard (temporary).....do.....	1,200.00		198	7		
Guard (temporary).....do.....	1,100.00		150			
Clerk.....do.....	1,400.00		1			
Clerk.....do.....	1,200.00		2	1		
Clerk.....do.....	1,100.00		9	3		
Clerk.....do.....	1,020.00		1	1		
Scalers, clerks, telephone operators, etc., \$960 to \$12.....do.....		98	65	192		
Wages:						
Miscellaneous temporary labor, \$125 to \$60.....per month..		3,733	3,787	1,680		
		4,972	5,731	3,932		
Salaries.....		\$342,720	\$225,563	\$483,400		
Wages.....		1,030,019	656,739	379,333		
OTHER OBJECTS OF EXPENDITURE.						
Traveling expenses.....		326,720	297,648	273,995		
Equipment and material.....		376,697	205,426	179,947		
Telephone and telegraph service.....		23,262	21,194	20,545		
Miscellaneous items.....		220,874	213,722	249,491		
Total.....		2,320,292	1,620,292	1,586,711		

- (64) [Absaroka National Forest, Montana, \$6,703; Angeles National Forest, California, \$11,926; Apache National Forest, Arizona, \$9,779; Arapahoe National Forest, Colorado, \$5,736; Arkansas National Forest, Arkansas, \$15,730; Ashley National Forest, Utah and Wyoming, \$3,865; Battlement National Forest, Colorado, \$4,916; Beartooth National Forest, Montana, \$7,597; Beaverhead National Forest, Montana and Idaho, \$5,296; Bighorn National Forest, Wyoming, \$6,937; Bitterroot National Forest, Montana, \$17,189; Blackfeet National Forest, Montana, \$19,888; Black Hills National Forest, South Dakota and Wyoming, \$12,668; Boise National Forest, Idaho, \$5,247; Bridger National Forest, Wyoming, \$3,159; Cabinet National Forest, Montana, \$16,806; Cache National Forest, Utah and Idaho, \$2,207; California National Forest, California, \$15,028; Caribou National Forest, Idaho and Wyoming, \$6,403; Carson National Forest, New Mexico, \$9,302; Cascade National Forest,

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Forest Service—Continued.</i>		
<p>Oregon, \$7,835; Challis National Forest, Idaho, \$3,668; Chelan National Forest, Washington, \$6,260; Chugach National Forest, Alaska, \$7,938; Clearwater National Forest, Idaho, \$38,201; Cleveland National Forest, California, \$8,433; Cochetopa National Forest, Colorado, \$5,931; Coconino National Forest, Arizona, \$21,673; Coeur d'Alene National Forest, Idaho, \$53,290: <i>Provided</i>, That the Secretary of Agriculture is authorized to use not to exceed \$500 of the funds herein appropriated for the Coeur d'Alene National Forest for the marking of the graves in Wallace, Idaho, of thirteen men who lost their lives while fighting forest fires in the employ of the Forest Service on the Coeur d'Alene National Forest on August 10, 1910; including concrete curbing for the graves, and seeding, planting, and improving the plot; Colorado National Forest, Colorado, \$7,459; Columbia National Forest, Washington, \$9,758; Colville National Forest, Washington, \$8,399; Coronado National Forest, Arizona and New Mexico, \$11,050; Crater National Forest, Oregon and California, \$22,688; Crook National Forest, Arizona, \$3,735; Custer National Forest, Montana and South Dakota, \$5,470; Datil National Forest, New Mexico, \$13,950; Deerlodge National Forest, Montana, \$19,813; Deschutes National Forest, Oregon, \$10,175; Dixie National Forest, Utah, Arizona, and Nevada, \$1,596; Durango National Forest, Colorado, \$4,964; Eldorado National Forest, California and Nevada, \$7,988; Fillmore National Forest, Utah, \$4,987; Fishlake National Forest, Utah, \$2,320; Flathead National Forest, Montana, \$51,826; Florida National Forest, Florida, \$4,927; Fremont National Forest, Oregon, \$5,427; Gallatin National Forest, Montana, \$4,810; Gila National Forest, New Mexico, \$10,847; Gunnison National Forest, Colorado, \$5,371; Harney National Forest, South Dakota, \$6,535; Hayden National Forest, Wyoming and Colorado, \$5,868; Helena National Forest, Montana, \$4,012; Holy Cross National Forest, Colorado, \$6,394; Humboldt National Forest, Nevada, \$6,330; Idaho National Forest, Idaho, \$33,365; Inyo National Forest, California and Nevada, \$3,076; Jefferson National Forest, Montana, \$8,430; Kaibab National Forest, Arizona, \$2,708; Kaniksu National Forest, Idaho and Washington, \$28,000; Klamath National Forest, California and Oregon, \$20,249; Kootenai National Forest, Montana, \$26,102; La Sal National Forest, Utah and Colorado, \$2,754; Lassen National Forest, California, \$14,181; Leadville National Forest, Colorado, \$5,524; Lemhi National Forest, Idaho, \$2,490; Lewis and Clark National Forest, Montana, \$10,626; Lincoln National Forest, New Mexico, \$11,178; Lolo National Forest, Montana, \$26,652; Luquillo National Forest, Porto Rico, \$1,700; Madison National Forest, Montana, \$3,930; Malheur National Forest, Oregon, \$6,091; Manti National Forest, Utah, \$6,090; Manzano National Forest, New Mexico, \$5,860; Medicine Bow National Forest, Wyoming, \$9,450; Michigan National Forest, Michigan, \$1,981; Minidoka National Forest, Idaho and Utah, \$4,709; Minnesota National Forest, Minnesota, \$2,970; Missoula National Forest, Montana, \$15,212; Modoc National Forest, California, \$7,388; Mono National Forest, Nevada and California, \$1,647; Monte-</p>		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<p><i>General Expenses, Forest Service—Continued.</i></p> <p>zuma National Forest, Colorado, \$4,670; Nebraska National Forest, Nebraska, \$1,165; and to extend the work to the Niobrara division thereof, \$5,000: <i>Provided</i>, That from the nurseries on said forest the Secretary of Agriculture, under such rules and regulations as he may prescribe, may furnish young trees free, so far as they may be spared, to residents of the territory covered by "An Act increasing the area of homesteads in a portion of Nebraska," approved April 28, 1904, \$6,165; Nevada National Forest, Nevada, \$2,249; Nezperce National Forest, Idaho, \$25,690; Ochoco National Forest, Oregon, \$6,451; Okanogan National Forest, Washington, \$11,464; Olympic National Forest, Washington, \$16,598; Oregon National Forest, Oregon, \$20,409; Ozark National Forest, Arkansas, \$9,030; Payette National Forest, Idaho, \$17,887; Pend Oreille National Forest, Idaho, \$20,074; Pike National Forest, Colorado, \$13,373; Plumas National Forest, California, \$24,203; Powell National Forest, Utah, \$1,010; Prescott National Forest, Arizona, \$6,255; Ranier National Forest, Washington, \$13,035; Rio Grande National Forest, Colorado, \$7,157; Routt National Forest, Colorado, \$6,585; Salmon National Forest, Idaho, \$6,177; San Isabel National Forest, Colorado, \$3,924; San Juan National Forest, Colorado, \$5,534; Santa Barbara National Forest, California, \$10,774; Santa Fe National Forest, New Mexico, \$17,040; Santiam National Forest, Oregon, \$7,852; Sawtooth National Forest, Idaho, \$4,953; Selway National Forest, Idaho, \$47,367; Sequoia National Forest, California, \$13,744; Sevier National Forest, Utah, \$2,110; Shasta National Forest, California, \$17,425; Shoshone National Forest, Wyoming, \$7,381; Sierra National Forest, California, \$15,750; Siskiyou National Forest, Oregon and California, \$16,360; Sitgreaves National Forest, Arizona, \$8,341; Siuslaw National Forest, Oregon, \$6,042; Snoqualmie National Forest, Washington, \$13,566; Sopris National Forest, Colorado, \$5,411; Stanislaus National Forest, California, \$14,697; St. Joe National Forest, Idaho, \$32,026; Superior National Forest, Minnesota, \$9,809; Tahoe National Forest, California and Nevada, \$16,337; Targhee National Forest, Idaho and Wyoming, \$9,558; Teton National Forest, Wyoming, \$4,404; Toiyabe National Forest, Nevada, \$3,694; Tongass National Forest, Alaska, \$15,224; Tonto National Forest, Arizona, \$7,685; Trinity National Forest, California, \$19,484; Tusayan National Forest, Arizona, \$8,819; Uinta National Forest, Utah, \$4,555; Umatilla National Forest, Oregon, \$6,562; Umpqua National Forest, Oregon, \$13,509; Uncompahgre National Forest, Colorado, \$6,690; Wallowa National Forest, Oregon, \$9,617; Wasatch National Forest, Utah, \$5,000; Washakie National Forest, Wyoming, \$6,726; Washington National Forest, Washington, \$7,642; Weiser National Forest, Idaho, \$6,493; Wenaha National Forest, Washington and Oregon, \$5,420; Wenatchee National Forest, Washington, \$11,884; White River National Forest, Colorado, \$6,272; Whitman National Forest, Oregon, \$25,201; Wichita National Forest, Oklahoma, \$2,416; Wyoming National Forest, Wyoming, \$5,089.】</p>		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Forest Service—Continued.</i>		
<p>Additional national forests created or to be created under section 11 of the Act of March 1, 1911 (Thirty-sixth Statutes at Large, page 963), and lands under contract for purchase or for the acquisition of which condemnation proceedings have been instituted for the purposes of said Act, \$84,750.]</p>		
<p>NOTE.—It is proposed to consolidate into one fund the appropriations for the individual national forests and the item for additional national forests created or to be created under section 11 of the Act of March 1, 1911. (See note under item 63.)</p>		
<p>(65) For necessary miscellaneous expenses incident to the general administration of the Forest Service and of the national forests, [\$479,970] \$650,000, of which sum \$175,000 may be expended in the District of Columbia [specified above: In National Forest District One, \$61,700; in National Forest District Two, \$47,800; in National Forest District Three, \$55,200; in National Forest District Four, \$49,500; in National Forest District Five, \$69,740; in National Forest District Six, \$60,800; in National Forest District Seven, \$14,900; in the District of Columbia, \$120,330] (acts Mar. 3, 1899, vol. 30, p. 1095, sec. 1; June 3, 1902, vol. 32, p. 295, sec. 1; Feb. 1, 1905, vol. 33, p. 268, sec. 1; June 11, 1906, vol. 34, p. 233, sec. 1; Mar. 1, 1911, vol. 36, p. 963, sec. 1; Mar. 4, 1913, vol. 37, p. 842, sec. 1; Mar. 4, 1915, vol. 38, p. 1099, sec. 1; May 31, 1920, vol. 41, pp. 706-711, sec. 1) ----- \$650, 000. 00</p>		
<p>NOTE.—There is an increase in this item of \$170,030. In the current appropriation act the amounts for general administration are itemized by national forest districts and the District of Columbia. It is proposed to consolidate these several subappropriations in one fund, with a proviso that \$175,000 of the total may be expended in the District of Columbia, as these general administration items are used interchangeably with each other and with the individual forest appropriations when need arises in connection with forest fire and other unforeseen emergencies. The change will not affect the present form of administration, but is made solely in the interest of simplicity and economy of administration.</p> <p>The amounts appropriated for general administration of the Forest Service have remained practically stationary year after year, while all transportation and office expenses have risen rapidly in keeping with the general advance in commodity prices. Provision should also be made for higher rates of pay for personal service, including temporary and emergency employees, properly chargeable to the administrative fund.</p>		
<p>(66) In all, for the use, maintenance, improvement, protection, and general administration of the [specified] national forests, [\$2,100,262] \$2,970,292: <i>Provided</i>, That the foregoing amounts appropriated for such purposes shall be available interchangeably in the discretion of the Secretary of Agriculture for the necessary expenditures for fire protection and other unforeseen exigencies: <i>Provided further</i>, That the amounts so interchanged shall not exceed in the aggregate 10 per centum of all the amounts so appropriated; (<i>same acts</i>).</p>		
<p>NOTE.—There is an apparent increase in the above amount of \$870,303, and an actual increase of \$875,030; of the net increase \$705,000 is for national forests and \$170,030 for general administration.</p> <p>The word "specified" may be omitted if the individual forest appropriations are combined.</p>		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.					Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Forest Service—Continued.</i>						
<i>General administration.</i>						
Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.		
Salaries:		Number.	Number.	Number.		
Associate forester.....per annum..	\$4,500.00	1	1	1		
Assistant forester.....do.....	4,500.00	5	5	1		
Assistant forester.....do.....	4,200.00	1	1	1		
Assistant forester.....do.....	4,000.00	1	2	2		
Assistant forester.....do.....	3,780.00	1	1	1		
Assistant forester.....do.....	3,500.00	1	1	1		
Assistant forester.....do.....	3,300.00	1	1	1		
District forester.....do.....	4,200.00	1	1	1		
District forester.....do.....	4,140.00	2	2	2		
District forester.....do.....	4,000.00	3	2	2		
District forester.....do.....	3,600.00	1	4	3		
District forester.....do.....	3,200.00	1	1	2		
Assistant district forester.....do.....	3,840.00	12	1	1		
Assistant district forester.....do.....	3,600.00	8	1	1		
Assistant district forester.....do.....	3,480.00	3	1	1		
Assistant district forester.....do.....	3,240.00	2	3	5		
Assistant district forester.....do.....	3,000.00	5	15	11		
Assistant district forester.....do.....	2,900.00	1	1	1		
Assistant district forester.....do.....	2,800.00	1	1	2		
Assistant district forester.....do.....	2,700.00	2	2	3		
Assistant district forester.....do.....	2,500.00	2	2	1		
Assistant district forester.....do.....	2,400.00	2	2	2		
Attorney.....do.....	3,250.00	1	1	1		
Chief engineer.....do.....	4,500.00	1	1	1		
Chief engineer.....do.....	4,000.00	1	1	1		
Engineer.....do.....	4,000.00	1	1	1		
Engineer.....do.....	3,840.00	1	1	1		
Engineer.....do.....	3,420.00	1	1	1		
Engineer (part time).....do.....	3,000.00	4	2	2		
Engineer.....do.....	2,800.00	1	1	1		
Engineer.....do.....	2,700.00	6	5	2		
Engineer.....do.....	2,600.00	1	1	4		
Engineer.....do.....	2,400.00	4	4	2		
Engineer.....do.....	2,200.00	1	1	3		
Engineer.....do.....	2,100.00	3	2	1		
Engineer.....do.....	2,000.00	1	1	2		
Engineer.....do.....	1,800.00	4	3	1		
Inspector.....do.....	3,600.00	2	2	1		
Inspector.....do.....	3,500.00	1	1	1		
Inspector.....do.....	3,420.00	2	1	1		
Inspector.....do.....	3,300.00	1	1	1		
Inspector.....do.....	3,240.00	4	4	1		
Inspector.....do.....	3,000.00	4	1	3		
Inspector.....do.....	2,800.00	1	1	1		
Inspector.....do.....	2,700.00	2	1	2		
Inspector.....do.....	2,500.00	1	1	1		
Inspector.....do.....	2,400.00	5	4	2		
Inspector.....do.....	2,200.00	7	1	1		
Inspector.....do.....	2,100.00	1	1	1		
Inspector.....do.....	2,000.00	1	1	2		
Inspector.....do.....	1,980.00	3	3	1		
Inspector.....do.....	1,800.00	3	1	1		
Inspector.....do.....	1,700.00	1	1	2		
Inspector.....do.....	1,620.00	1	2	1		
Chief of claims.....do.....	2,400.00	1	1	1		
Lumberman.....do.....	2,400.00	2	1	1		
Lumberman.....do.....	2,100.00	1	1	1		
Lumberman.....do.....	2,000.00	2	2	1		
Lumberman.....do.....	1,980.00	1	1	1		
Lumberman.....do.....	1,800.00	6	1	3		
Lumberman.....do.....	1,620.00	1	1	1		
Examiner.....do.....	2,700.00	2	1	1		
Examiner.....do.....	2,520.00	6	1	1		
Examiner.....do.....	2,400.00	8	4	3		
Examiner.....do.....	2,340.00	1	1	1		
Examiner.....do.....	2,220.00	2	4	1		
Examiner.....do.....	2,100.00	6	4	4		
Examiner.....do.....	2,000.00	8	3	5		
Examiner.....do.....	1,980.00	2	2	1		
Examiner.....do.....	1,920.00	4	2	1		
Examiner.....do.....	1,860.00	2	2	1		
Examiner.....do.....	1,800.00	24	6	5		
Examiner.....do.....	1,740.00	1	1	3		
Examiner.....do.....	1,680.00	1	1	1		
Examiner.....do.....	1,620.00	4	1	9		
Examiner.....do.....	1,560.00	1	1	2		
Examiner.....do.....	1,500.00	1	1	2		
Examiner.....do.....	1,440.00	2	2	3		
Assistants, clerks, blue printers, photographers, messengers, surveyors, janitors, etc., \$125 per month to \$360.....per annum..		10	11	19		
Wages:						
Miscellaneous temporary labor, \$75 per month to \$2 per diem.....		32	16	31		
		217	170	163		
Salaries.....		\$411,000.00	\$341,200.00	\$339,200.00		
Wages.....		5,660.00	2,100.00	5,620.00		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.					Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Forest Service—Continued.</i>						
Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.		
OTHER OBJECTS OF EXPENDITURE.						
Traveling expenses.....		\$160,000.00	\$109,700.00	\$97,934.00		
Equipment and material.....		41,500.00	3,270.00	11,302.00		
Telephone and telegraph service.....		14,700.00	13,600.00	13,300.00		
Miscellaneous items.....		17,140.00	10,100.00	12,990.00		
Total.....		650,000.00	479,970.00	480,346.00		
(67) <i>For fighting and preventing forest fires, \$350,000, or so much thereof as may be necessary, but not to exceed \$150,000 of this fund shall be expended except in cases of extraordinary emergency; and to enable the Secretary of Agriculture to cooperate with the War Department in the maintenance of an air patrol for fire prevention and suppression on the national forests of the Pacific coast and the Rocky Mountain regions, \$50,000: Provided, That no part of this appropriation shall be used for the purchase of land or airplanes or for the construction of permanent buildings; in all (submitted) -----</i>					\$400,000.00	
<p>NOTE.—This item is transferred from the Miscellaneous section of the estimates, since it is properly a Forest Service appropriation, and the amount increased by \$100,000. Inasmuch as the item carries \$50,000 for cooperation with the War Department in the maintenance of an aerial fire patrol, the actual increase for the regular fire-suppression work in cases of extraordinary emergency is only \$100,000. The appropriation of \$250,000 has proved to be insufficient in any except very wet years. During the past 11 years there have been only five years in which the expenditures for fire fighting amounted to \$250,000 or less. The annual average has been \$758,728. In the calendar year 1920, which is regarded as a favorable year, it is estimated that the total expenditure for fire fighting will amount to between \$800,000 and \$900,000. It is undesirable that this work be conducted on a deficiency basis. It should also be borne in mind that \$100,000 of this appropriation would merely constitute an insurance fund and could only be expended in cases of serious emergency, when the Government would be obligated to take the steps necessary to protect its own property, as well as the communities and human lives within the national forests.</p> <p>The word "permanent" has been added after the words "construction of." Under the present language the Forest Service is greatly embarrassed in cooperating with the War Department in airplane patrol. The men and their equipment can be sheltered only in tents or similar inadequate covers. If the proposed amendment is approved, it is the intention to erect only inexpensive and temporary shelters and tool caches at places where landings must be made or related activities carried on in connection with airplane patrol.</p> <p>This being an emergency appropriation, it is impracticable to submit the detailed estimate of expenditures required by section 10 of the sundry civil act of Aug. 1, 1914.</p>						
(68) <i>For preventing and combating infestations of insects injurious to forest trees on and near the national forests, independently or in cooperation with other branches of the Federal Government, with States, counties, municipalities, or with private owners (submitted) -----</i>					25,000.00	
<p>NOTE.—This is a new item. It has been attempted heretofore to combat insect attacks in the forests from funds available for forest protection. The work of fighting insects has to be done largely in the early spring; consequently the funds available depend on the balance remaining from the preceding fire season, and it has been impossible, therefore, to carry on systematic insect control work. As a result, there has been a great loss of Government timber from inability to combat insect attacks as they occur on or near the national forests. The loss has been estimated at approximately a quarter of a million dollars annually in California alone.</p>						

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
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General Expenses, Forest Service—Continued.

Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.
Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>
Examiner.....per annum..	\$1,800 00	2	(1)	(1)
Examiner.....do.....	1,600.00	2		
Wages:				
Temporary laborers.....per month..	75.00	90		
		94		
Salaries.....		\$6,900 00		
Wages.....		10,000.00		
OTHER OBJECTS OF EXPENDITURE.				
Traveling expenses.....		1,100.00		
Equipment and material.....		4,940 00		
Miscellaneous items.....		2,000.00		
Total.....		25,000.00		

¹ No appropriations for fiscal years 1920 and 1921.

- (69) For the selection, classification, and segregation of lands within the boundaries of national forests that may be opened to homestead settlement and entry under the homestead laws applicable to the national forests; for the examination and appraisal of lands in effecting exchanges authorized by law and for the survey thereof by metes and bounds or otherwise by employees of the Forest Service under the direction of the Commissioner of the General Land Office; and for the survey and platting of certain lands, chiefly valuable for agriculture, now listed or to be listed within the national forests, under the act of June 11, 1906 (Thirty-fourth Statutes, page 233), and the act of March 3, 1899 (Thirtieth Statutes, page 1095), as provided by the act of March 4, 1913 (*acts Mar. 3, 1899, vol. 30, p. 1095, sec. 1; June 3, 1902, vol. 32, p. 295, sec. 1; Feb. 1, 1905, vol. 33, p. 268, sec. 1; June 11, 1906, vol. 34, p. 233, sec. 1; Mar. 1, 1911, vol. 36, p. 963, sec. 1; Mar. 4, 1913, vol. 37, p. 842, sec. 1; Mar. 4, 1915, vol. 38, p. 1099, sec. 1; May 31, 1920, vol. 41, pp. 706-711, sec. 1*)..... \$87,000.00

Appropriation for 1914.....	\$65,000	Estimate for 1915.....	\$100,000
Appropriation for 1915.....	100,000	Estimate for 1916.....	100,000
Appropriation for 1916.....	100,000	Estimate for 1917.....	100,000
Appropriation for 1917.....	100,000	Estimate for 1918.....	78,400
Appropriation for 1918.....	147,700	Estimate for 1919.....	119,800
Appropriation for 1919.....	119,800	Estimate for 1920.....	107,000
Appropriation for 1920.....	107,000	Estimate for 1921.....	107,000
Appropriation for 1921.....	87,000	Estimate for 1922.....	87,000

Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.
Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>
Engineers (part time).....per annum..	\$1,800.00	1	1	
Examiner.....do.....	2,200.00	1	2	
Examiner.....do.....	2,000.00	3	1	2
Examiner.....do.....	1,920.00		1	1
Examiner.....do.....	1,900.00		1	
Examiner (part time).....do.....	1,800.00	3	2	3
Examiner.....do.....	1,700.00		1	1
Examiner.....do.....	1,620.00	1	1	1
Surveyor.....do.....	1,950.00		1	
Surveyor.....do.....	1,800.00	2	1	
Surveyor.....do.....	1,500.00	2	3	1
Surveyor.....do.....	1,400.00			2
Draftsman.....do.....	1,500.00	1	1	
Draftsman.....do.....	1,400.00			1
Draftsman.....do.....	1,320.00			1
Draftsman.....do.....	1,200.00			1
Clerk (part time).....do.....	1,200.00	1	1	
Clerk.....do.....	1,100.00			1
Clerk.....do.....	1,020.00		1	1
Map colorists, blue printers, and field assistants, \$1,000 to \$720.....do.....		6	18	
Wages:				
Temporary laborers, \$3.50 to \$2.50.....per diem..		52	54	80
		73	72	114
Salaries.....		\$27,200.00	\$28,580.00	\$38,785.00
Wages.....		20,600.00	18,440.00	18,300.00

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.					Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Forest Service—Continued.</i>						
Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.		
OTHER OBJECTS OF EXPENDITURE.						
Traveling expenses.....		\$23,630.00	\$22,300.00	\$25,793.00		
Equipment and material.....		12,200.00	11,700.00	6,970.00		
Miscellaneous items.....		3,400.00	5,980.00	12,016.00		
Total.....		87,000.00	87,000.00	101,861.00		
(70) For the purchase and maintenance of necessary field, office, and laboratory supplies, instruments, and equipments [\$150,000] (<i>acts Mar. 3, 1899, vol. 30, p. 1095, sec. 1; June 3, 1902, vol. 32, p. 295, sec. 1; Feb. 1, 1905, vol. 33, p. 268, sec. 1; June 11, 1906, vol. 34, p. 233, sec. 1; Mar. 1, 1911, vol. 36, p. 963, sec. 1; Mar. 4, 1913, vol. 37, p. 842, sec. 1; Mar. 4, 1915, vol. 38, p. 1099, sec. 1; May 31, 1920, vol. 41, pp. 706-711, sec. 1</i>).....					\$175,000.00	
Appropriation for 1912.....	\$198,080	Estimate for 1913.....	\$155,000			
Appropriation for 1913.....	155,000	Estimate for 1914.....	168,000			
Appropriation for 1914.....	163,000	Estimate for 1915.....	160,000			
Appropriation for 1915.....	163,000	Estimate for 1916.....	158,000			
Appropriation for 1916.....	152,000	Estimate for 1917.....	150,400			
Appropriation for 1917.....	153,400	Estimate for 1918.....	161,100			
Appropriation for 1918.....	161,100	Estimate for 1919.....	161,100			
Appropriation for 1919.....	161,100	Estimate for 1920.....	161,100			
Appropriation for 1920.....	161,100	Estimate for 1921.....	173,600			
Appropriation for 1921.....	150,000	Estimate for 1922.....	175,000			
NOTE.—There is an increase in this item of \$25,000. The cost of the most important supplies in point of quantity purchased, such as type-writer paper, envelopes, filing guides and folders, card record forms, wrapping paper, etc., has increased from 52 to 100 per cent during the past two years. The average increase in cost of all supplies is 36 per cent. The recent freight rate increase was 33 per cent. It is therefore evident that an increased appropriation will be necessary if the work dependent upon this fund for supplies and equipment is not to be retarded.						
Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.		
Salaries:		Number.	Number.	Number.		
Property assistant.....per annum..	\$2,500.00	1	1	1		
Auditor.....do.....	2,120.00	1	1	1		
		2	2	2		
Salaries.....		\$4,620.00	\$4,620.00	\$4,620.00		
OTHER OBJECTS OF EXPENDITURE:						
Stationery.....		40,000.00	38,600.00	39,100.00		
Traveling expenses.....		2,000.00	1,500.00	1,942.00		
Equipment and material.....		118,030.00	96,200.00	112,906.00		
Miscellaneous items.....		10,380.00	9,080.00	4,998.00		
Total.....		175,000.00	150,000.00	163,566.00		
(71) For investigations of methods for wood distillation and for the preservative treatment of timber, for timber testing, and the testing of such woods as may require test to ascertain if they be suitable for making paper, for investigations and tests within the United States of foreign woods of commercial importance to industries in the United States, and for other investigations and experiments to promote economy in the use of forest products, and for commercial demonstrations of improved methods or processes, in cooperation with individuals and companies [\$223,260] (<i>same acts</i>).....					400,000.00	

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
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General Expenses, Forest Service—Continued.

Appropriation for 1912.....	\$177,040	Estimate for 1913.....	\$150,000
Appropriation for 1913.....	170,000	Estimate for 1914.....	170,000
Appropriation for 1914.....	140,000	Estimate for 1915.....	140,000
Appropriation for 1915.....	140,000	Estimate for 1916.....	140,000
Appropriation for 1916.....	140,000	Estimate for 1917.....	135,200
Appropriation for 1917.....	135,200	Estimate for 1918.....	178,100
Appropriation for 1918.....	155,600	Estimate for 1919.....	173,260
Appropriation for 1919.....	173,260	Estimate for 1920.....	208,260
Appropriation for 1920.....	173,260	Estimate for 1921.....	348,260
Appropriation for 1921.....	223,260	Estimate for 1922.....	400,000

NOTE.—There is an increase in this item of \$176,740. The economical and efficient use of forest products is fully as important in the conservation of our forests as the elimination of losses by fire, insects, and disease and the securing of increased production in standing timber. The more efficient utilization of forest products means not only a decreased drain upon the forests but the saving of hundreds of millions of dollars a year to the people of the country. During its 10 years of research, a conservative estimate of the total savings growing out of the work of the Forest Products Laboratory is placed at \$70,000,000. An increase in the funds available for investigations would result in correspondingly increased savings.

The great bulk of the increase recommended will, if granted, be used at the Forest Products Laboratory. Even with this additional amount, the funds available would be less than the annual budget of the laboratory during the war, and only a part of the more important problems awaiting solution could be undertaken. Comparatively small increases will be needed for work in the Washington office and in the various national forest districts.

Of the many problems requiring solution, the following are cited as examples:

In the newsprint industry, where there is now a serious shortage of raw material, present processes convert less than 50 per cent of the raw wood into paper. It should be possible to utilize the bulk of this waste material through the reclamation of valuable chemical constituents.

If all mill waste, such as sawdust and slabs, could be converted into ethyl alcohol, it is estimated that it would yield an annual production of 280,000,000 gallons. Knowledge as to the best methods of doing this is urgently needed in view of the predicted decrease in the production of petroleum and the necessity for developing an adequate supply of some substitute fuel.

Preventable losses in the seasoning of wood in the United States approximate \$50,000,000 annually. Additional investigations in the kiln drying of wood would lead to the saving of part or all of this amount.

It is estimated that further research, accompanied by the practical application of preservative processes for the treating of such materials as ties, poles, posts, etc., would result in an annual saving of \$75,000,000.

The annual loss of \$200,000,000 from fire in wooden structures could be materially reduced by investigations leading to the development of fire-retarding paints and compounds and fire-resisting wood construction.

Research leading to the utilization of waste through improved methods of logging, milling, and manufacture, and the development of built-up construction, would result in almost unbelievable savings.

Similar possibilities exist throughout the entire field of wood utilization.

Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.
Salaries:		Number.	Number.	Number.
Director.....per annum..	\$4,260.00	1	1	1
Director.....do.....	3,780.00	1	1	1
Assistant director.....do.....	3,880.00	1	1	1
Assistant director.....do.....	3,540.00	1	1	1
Superintendent.....do.....	3,000.00	1	1	1
Fiscal agent.....do.....	2,120.00	1	1	1
Engineer.....do.....	3,500.00	1	1	1
Engineer.....do.....	3,480.00	2	2	2
Engineer.....do.....	3,200.00	2	2	1
Engineer.....do.....	3,000.00	2	2	2
Engineer (part time).....do.....	2,800.00	1	1	1
Engineer.....do.....	2,700.00	1	1	3
Engineer.....do.....	2,600.00	2	2	1
Engineer.....do.....	2,500.00	1	1	2
Engineer.....do.....	2,400.00	4	5	5
Engineer.....do.....	2,300.00	2	2	2
Engineer.....do.....	2,200.00	2	2	1
Engineer.....do.....	2,100.00	1	2	1
Engineer.....do.....	2,000.00	2	1	1
Engineer.....do.....	1,800.00	13	13	5
Engineer.....do.....	1,700.00	2	2	4

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.					Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Forest Service—Continued.</i>						
Employees.	Rate.	Esti- mated, 1922.	Appro- priated, 1921.	Ex- pended, 1920.		
Salaries—Continued.		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>		
Engineer..... per annum.....	\$1,600.00	3	5	2		
Engineer.....do.....	1,500.00	4	4	6		
Engineer.....do.....	1,300.00			4		
Engineer.....do.....	1,200.00			4		
Physicist.....do.....	3,300.00	1	1	1		
Chemist.....do.....	3,480.00	1	1			
Chemist.....do.....	3,000.00	1		1		
Chemist.....do.....	2,880.00	2	1			
Chemist.....do.....	2,600.00	2	3	3		
Chemist.....do.....	2,500.00	1	1	1		
Chemist.....do.....	2,400.00	1	2			
Chemist.....do.....	2,100.00	2	1			
Chemist.....do.....	1,800.00		5	3		
Chemist.....do.....	1,600.00	2	2	1		
Chemist.....do.....	1,500.00	1	2	2		
Chemist.....do.....	1,200.00			2		
Microscopist.....do.....	1,900.00	1	1	1		
Xylogonomist.....do.....	1,000.00	1	1	1		
Specialist.....do.....	1,980.00		2	3		
Specialist.....do.....	1,800.00		1	3		
Specialist.....do.....	1,500.00			1		
Statistician.....do.....	2,700.00	1	1	1		
Statistician.....do.....	1,800.00	1	1	1		
Statistician (part time).....do.....	1,700.00	2	2	1		
Examiner.....do.....	3,500.00			1		
Examiner.....do.....	3,200.00	2	1			
Examiner.....do.....	2,500.00	2	1			
Examiner.....do.....	2,400.00	2	3	1		
Examiner.....do.....	2,000.00	1		1		
Examiner.....do.....	1,800.00	5	5	2		
Examiner.....do.....	1,600.00	2	2	1		
Examiner.....do.....	1,500.00		2			
Assistant.....do.....	1,800.00			1		
Assistant.....do.....	1,600.00			1		
Paper maker.....do.....	1,380.00	1	1			
Paper maker.....do.....	1,260.00	1	1			
Paper maker.....do.....	1,200.00	3	1			
Paper maker.....do.....	1,100.00			1		
Paper maker.....do.....	1,000.00			1		
Clerk (temporary).....do.....	1,320.00		1			
Clerk (temporary).....do.....	1,200.00	6	4	1		
Clerk (temporary).....do.....	1,100.00	2	2	1		
Clerk (temporary).....do.....	1,000.00	5	6			
Clerks, draftsmen, laboratory aids and messengers, \$125 per month to \$12 per annum.....		60	38	27		
Wages:						
Foreman.....do.....	1,500.00	1	1	1		
Machinist.....do.....	1,500.00	1	1	1		
Machinist.....do.....	1,260.00	1	1	1		
Carpenter.....do.....	1,200.00	2	2	2		
Carpenter.....do.....	1,000.00			7		
Miscellaneous temporary labor, \$100 per month to \$0.30.....per hour.....		76	41	26		
		163	190	144		
Salaries.....		\$218,000.00	\$130,000.00	\$101,897.00		
Wages.....		35,000.00	24,500.00	19,205.00		
OTHER OBJECTS OF EXPENDITURE.						
Traveling expenses.....		49,500.00	36,760.00	28,980.00		
Equipment and material.....		81,600.00	20,600.00	15,492.00		
Miscellaneous items.....		15,900.00	10,800.00	6,764.00		
Total.....		400,000.00	223,260.00	172,338.00		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
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General Expenses, Forest Service—Continued.

- (72) For the development and improvement of the recreational resources of the national forests, including the protection and propagation of game and fish (submitted)..... \$50,000.00

NOTE.—This is a new item. Several million people annually visit the national forests for purposes of recreation. They seek the natural camp sites along streams, lakes, or springs, to enjoy the diversions offered by the national forests. Grouping these campers at selected sites prevents the promiscuous building of camp fires which endanger Government timber. Sanitation and comfort require the installation of latrines, tables, repositories for refuse, benches, the improvement of springs, and similar public conveniences. With its present appropriations the Forest Service is wholly unable to take care of the pressing demands for such uses of the forests, much less to develop and improve them as they merit.

The presence of wild life adds greatly to the value of the national forests and forms a large part of their recreational value. In cooperation with the local State authorities, it is proposed to transport game from regions where it is plentiful to other localities where it has become extinct or scarce by too close hunting. Forest officers should also be able to extend their activities, under existing law, in helping to protect game in cooperation with State authorities and in transporting fish fry to streams suitable for their development.

Employees.	Rate.	Estimated, 1922.	Appropriated, 1921. ¹	Expended, 1920.
Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>
Engineer.....per annum..	\$3,000.00	1	.....	.....
Engineer.....do.....	2,880.00	1	.....	.....
Engineers.....do.....	2,400.00	3	.....	.....
Draftsmen.....do.....	1,500.00	2	.....	.....
Surveyors.....do.....	1,800.00	2	.....	.....
Wages:				
Miscellaneous temporary labor—				
\$5 to \$2.....per diem..		42	.....	.....
		51	.....	.....
Salaries.....		\$16,000.00	.....	.....
Wages.....		11,000.00	.....	.....
OTHER OBJECTS OF EXPENDITURE.				
Traveling expenses.....		6,200.00	.....	.....
Equipment and material.....		11,000.00	.....	.....
Miscellaneous items.....		5,800.00	.....	.....
Total.....		50,000.00	.....	.....

¹ No appropriation for fiscal years 1920 and 1921.

- (73) For experiments and investigations of range conditions within the national forests or elsewhere on the public range, and of methods for improving the range by reseedling, regulation of grazing, and other means **[\$35,000]** (*acts Mar. 3, 1899, vol. 30, p. 1095, sec. 1; June 3, 1902, vol. 32, p. 295, sec. 1; Feb. 1, 1905, vol. 33, p. 268, sec. 1; June 11, 1906, vol. 34, p. 233, sec. 1; Mar. 1, 1911, vol. 36, p. 963, sec. 1; Mar. 4, 1913, vol. 37, p. 842, sec. 1; Mar. 4, 1915, vol. 38, p. 1099, sec. 1; May 31, 1920, vol. 41, pp. 706-711, sec. 1*).. 70,000.00

Appropriation for 1912.....	\$18,420	Estimate for 1913.....	\$18,420
Appropriation for 1913.....	20,180	Estimate for 1914.....	25,820
Appropriation for 1914.....	25,000	Estimate for 1915.....	25,000
Appropriation for 1915.....	25,000	Estimate for 1916.....	25,000
Appropriation for 1916.....	30,000	Estimate for 1917.....	30,000
Appropriation for 1917.....	30,000	Estimate for 1918.....	35,000
Appropriation for 1918.....	35,000	Estimate for 1919.....	35,000
Appropriation for 1919.....	35,000	Estimate for 1920.....	35,000
Appropriation for 1920.....	35,000	Estimate for 1921.....	60,000
Appropriation for 1921.....	35,000	Estimate for 1922.....	70,000

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
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General Expenses, Forest Service—Continued.

NOTE.—There is an increase in this item of \$35,000. The present appropriation is insufficient to meet the ordinary day by day problems in forage investigations and range management, and it is practically impossible to do anything toward investigating important range problems on the public domain outside the national forests.

Intensive study of range plants and range management, with a view to improve the capacity and condition of the national forest pastures, is necessitated by the insistent demand for grazing privileges from small farmers, ranchers, and homesteaders. The steady settlement of outside lands is greatly increasing the demand for national forest range, and it is only through investigation of range problems that the national forests can supply this demand to the extent that their resources should permit. During 1917 and 1918 an increase of over 1,000,000 head was permitted in the number of stock grazed on the national forests. This was done as a war emergency to increase the production of meat, hides, and wool. However, it resulted in material damage to the ranges in numerous instances and necessitated a subsequent reduction in the number of animals grazed. It is believed that a large part of this extra stock can be carried on the national forests if the Forest Service is able to work out fully its opportunities for the scientific improvement and use of these ranges. This work should also lead to a permanent and substantial increase in grazing receipts.

Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.
Salaries:		Number.	Number.	Number.
Grazing inspector.....per annum..	\$3,600.00	1	1	1
Grazing inspector.....do.....	3,000.00	2	1	1
Grazing inspector.....do.....	2,220.00	1	1	1
Plant ecologist.....do.....	2,940.00	1	1	1
Plant ecologist.....do.....	2,520.00	1	1	1
Plant ecologist.....do.....	2,220.00	1	1	1
Plant ecologist.....do.....	1,800.00	1	1	1
Botanist.....do.....	1,800.00	1	1	1
Examiner.....do.....	2,220.00	1	1	1
Examiner.....do.....	2,100.00	2	2	2
Examiner.....do.....	2,000.00	4	2	2
Examiner.....do.....	1,800.00	4	2	2
Examiner.....do.....	1,600.00	1	1	1
Examiner.....do.....	1,380.00	1	1	1
Assistant.....do.....	1,320.00	1	1	1
Assistant.....do.....	1,200.00	7	6	6
Assistant.....do.....	1,100.00	1	1	1
Preparator.....do.....	960.00	1	1	1
Plant moulder.....do.....	900.00	1	1	1
Wages:				
Miscellaneous temporary labor—				
\$5 to \$1.50.....per diem.....		18	9	10
		47	32	21
Salaries.....		\$44,000.00	\$18,000.00	\$17,700.00
Wages.....		7,000.00	4,500.00	4,280.00
OTHER OBJECTS OF EXPENDITURE.				
Traveling expenses.....		10,500.00	8,500.00	9,612.00
Equipment and material.....		6,500.00	2,500.00	1,660.00
Miscellaneous items.....		2,000.00	1,500.00	1,712.00
Total.....		70,000.00	35,000.00	34,964.00

- (74) For the purchase of tree seed, cones, and nursery stock, for seeding and tree planting within national forests, and for experiments and investigations necessary for such seeding and tree planting, **[\$120,640] \$170,640: Provided, That hereafter from the nurseries on the Nebraska National Forest the Secretary of Agriculture, under such rules and regulations as he may prescribe, may furnish young trees free, so far as they may be spared, to residents of the territory covered by "An Act increasing the area of homesteads in a portion of Nebraska," approved April 28, 1904 (acts Mar. 3, 1899, vol. 30, p. 1095, sec. 1; June 3, 1902, vol. 32, p. 295, sec. 1; Feb. 1, 1905, vol. 33, p. 268, sec. 1; June 11, 1906, vol. 34, p. 233, sec. 1; Mar. 1, 1911, vol. 36, p. 963, sec. 1; Mar. 4, 1913, vol. 37, p. 842, sec. 1; Mar. 4, 1915, vol. 38, p. 1099, sec. 1; May 31, 1920, vol. 41, pp. 706-711, sec. 1).** \$170,640.00

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
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General Expenses, Forest Service—Continued.

Appropriation for 1912.....	\$166,600	Estimate for 1913.....	\$150,000
Appropriation for 1913.....	165,640	Estimate for 1914.....	165,640
Appropriation for 1914.....	165,640	Estimate for 1915.....	165,640
Appropriation for 1915.....	165,640	Estimate for 1916.....	165,640
Appropriation for 1916.....	165,640	Estimate for 1917.....	165,640
Appropriation for 1917.....	165,640	Estimate for 1918.....	165,640
Appropriation for 1918.....	165,640	Estimate for 1919.....	145,640
Appropriation for 1919.....	145,640	Estimate for 1920.....	145,640
Appropriation for 1920.....	145,640	Estimate for 1921.....	145,640
Appropriation for 1921.....	120,640	Estimate for 1922.....	170,640

NOTE.—There is an apparent increase in this item of \$50,000, but taking into consideration the transfer of \$5,000 from the item for Nebraska National Forest for the free distribution of young trees grown in the nurseries on that forest, the actual increase is only \$45,000.

The collection and distribution of seed, propagation of nursery stock, and tree planting work are all essential if many denuded areas in the national forests are ever to bear timber. Several years ago this appropriation was reduced \$45,000 as a measure of war economy. Even with the increase requested, the work can not be restored fully to its prewar basis in view of the higher cost of labor, materials, etc.

Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.
Salaries:		Number.	Number.	Number.
Examiner.....per annum.....	\$2,600.00	1		
Examiner.....do.....	2,460.00		1	
Examiner.....do.....	2,340.00	1		1
Examiner.....do.....	2,100.00	1	1	
Examiner.....do.....	2,040.00		1	1
Examiner.....do.....	2,000.00	4		2
Examiner.....do.....	1,920.00		1	
Examiner.....do.....	1,800.00	4	3	2
Examiner.....do.....	1,680.00		1	1
Examiner (part time).....do.....	1,600.00	7		1
Examiner.....do.....	1,440.00		5	2
Assistant.....do.....	1,500.00	4	2	2
Assistant.....do.....	1,380.00	2	2	1
Assistant.....do.....	1,200.00	4	2	1
Wages:				
Miscellaneous temporary labor—				
\$100 per month to \$0.25.....per hour.....		1,460	890	1,186
		1,488	909	1,200
Salaries.....		\$34,600.00	\$22,900.00	\$24,600.00
Wages.....		98,900.00	68,600.00	80,460.00
OTHER OBJECTS OF EXPENDITURE.				
Traveling expenses.....		9,770.00	7,460.00	8,600.00
Equipment and material.....		20,670.00	12,900.00	16,370.00
Miscellaneous items.....		6,700.00	8,780.00	12,510.00
Total.....		170,640.00	120,640.00	142,540.00

- (75) For silvicultural, dendrological, and other experiments and investigations independently or in cooperation with other branches of the Federal Government, with States and with individuals, to determine the best methods for the conservative management of forests and forest lands **[\$50,000]** (acts Mar. 3, 1899, vol. 30, p. 1095, sec. 1; June 3, 1902, vol. 32, p. 295, sec. 1; Feb. 1, 1905, vol. 33, p. 268, sec. 1; June 11, 1906, vol. 34, p. 233, sec. 1; Mar. 1, 1911, vol. 36, p. 963, sec. 1; Mar. 4, 1913, vol. 37, p. 842, sec. 1; Mar. 4, 1915, vol. 38, p. 1099, sec. 1; May 31, 1920, vol. 41, pp. 706–711, sec. 1).....

\$155,000.00

Appropriation for 1912.....	\$84,528	Estimate for 1913.....	\$83,728
Appropriation for 1913.....	83,728	Estimate for 1914.....	83,728
Appropriation for 1914.....	83,728	Estimate for 1915.....	83,728
Appropriation for 1915.....	83,728	Estimate for 1916.....	83,728
Appropriation for 1916.....	83,728	Estimate for 1917.....	78,728
Appropriation for 1917.....	78,728	Estimate for 1918.....	83,728
Appropriation for 1918.....	78,728	Estimate for 1919.....	78,728
Appropriation for 1919.....	78,728	Estimate for 1920.....	103,728
Appropriation for 1920.....	78,728	Estimate for 1921.....	153,728
Appropriation for 1921.....	50,000	Estimate for 1922.....	155,000

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.					Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Forest Service—Continued.</i>						
<p>NOTE.—There is an increase in this item of \$105,000. Recent investigations have shown that four times as much timber is cut as is being grown. Approximately 81,000,000 acres of forest land in the United States are practically an unproductive waste, and the remainder is growing only a fraction of the timber that would be possible with proper handling. Through increased forest production on lands now idle or only partially productive, it would be possible not only to make the country self-supporting but to have a surplus of timber available for export.</p> <p>To accomplish this result will require intensive research in the protection of forests from fire; development of improved methods of cutting and of brush disposal to bring about a satisfactory second growth of the desired species; production and planting of nursery stock; determination of the best species to use under given conditions, together with their rate of growth and yield; and similar problems. The best procedure for the conduct of such investigations is through the establishment of experiment stations in the various forest regions. Up to this time the work has been conducted on a totally inadequate scale, and this year it has been seriously crippled by a reduction of 36 per cent in the appropriation for silvicultural investigations, which has necessitated the virtual closing of three of the four forest experiment stations already in existence. To meet the need in any adequate way, at least 10 stations are required—one each in the Northeast, Pennsylvania, the Appalachians, the Southern pine belt, the Lake States, Arizona, Colorado, the Inland Empire, California, and the Pacific Northwest.</p> <p>The need for investigations along economic as well as silvicultural lines is equally urgent. The steady depletion of our forest resources is leading to higher prices, shortage of raw material in many important industries, the handicapping of farm development and of general building and construction, increased burdens upon transportation facilities, and similar difficulties. Thorough economic studies of these and related problems must be depended upon to furnish the basis for the adoption and execution of a sound forest policy. To cover adequately all the problems involved will require large appropriations and investigations extending through many years.</p>						
Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.		
Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>		
Chief forest investigation.....per annum..	\$3,840.00	1				
Chief forest investigation.....do.....	3,500.00		1			
Chief forest investigation.....do.....	3,200.00			1		
Assistant chief.....do.....	3,200.00	1	1			
Dendrologist.....do.....	3,300.00	1	1	1		
Chief, State cooperation.....do.....	3,840.00	1				
Chief, State cooperation.....do.....	3,600.00	1				
Chief, State cooperation.....do.....	3,000.00		1	1		
Forest economist.....do.....	3,500.00	1				
Forest economist.....do.....	3,200.00		1			
Engineer.....do.....	3,180.00	1	1			
Engineer.....do.....	3,000.00	2		1		
Examiner (part time).....do.....	3,000.00					
Examiner (part time).....do.....	2,700.00	2	1			
Examiner.....do.....	2,600.00	2	1	1		
Examiner (part time).....do.....	2,500.00	2	2	2		
Examiner.....do.....	2,400.00	4	2	2		
Examiner.....do.....	2,220.00	1	1			
Examiner (part time).....do.....	2,000.00	2	1	1		
Examiner.....do.....	1,800.00	2	1	4		
Examiner (part time).....do.....	1,680.00		2			
Examiner (part time).....do.....	1,400.00		1			
Assistant (temporary).....do.....	1,500.00	12				
Assistant.....do.....	1,100.00		5	7		
Wages:						
Miscellaneous temporary labor, \$125 to \$60 .....per month..		82	20	29		
		118	43	60		
Salaries.....	\$67,000.00		\$29,000.00	\$40,740.00		
Wages.....	17,600.00		5,200.00	10,300.00		
OTHER OBJECTS OF EXPENDITURE.						
Traveling expenses.....	22,500.00		8,600.00	12,700.00		
Equipment and material.....	32,000.00		6,200.00	10,326.00		
Miscellaneous items.....	15,900.00		1,000.00	3,982.00		
Total.....		155,000.00	50,000.00	78,046.00		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
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General Expenses, Forest Service—Continued.

- (76) *For the study of forests on farms and for advising farm owners as to the planting of waste lands with forest trees, the establishment and care of windbreaks, shelter woods, and woodlots, and the most advantageous marketing of forest products grown upon such farms (submitted) -----* \$25, 000. 00

NOTE.—This is a new item. There are more than 150,000,000 acres of forest land on farms in the United States, which can be made much more productive and much more valuable to their owners than is now the case. With the funds at its disposal the Forest Service has been unable to furnish to the farmers of the country the service which has been and is being demanded of it. So far as possible this work will be conducted in cooperation with other Federal bureaus and with State agencies.

Employees.	Rate.	Estimated, 1922.	Appropriated, 1921. ¹	Expended, 1920. ¹
Salaries:		Number.		
Examiner.....per annum.....	\$2, 400. 00	2		
Examiner.....do.....	2, 100. 00	2		
Examiner.....do.....	1, 800. 00	4		
Assistant.....do.....	1, 500. 00	6		
		14		
Salaries.....		\$20,000.00		
OTHER OBJECTS OF EXPENDITURE.				
Traveling expenses.....		5, 000. 00		
Total.....		25, 000. 00		

¹ No appropriation for the fiscal years 1920 and 1921.

- (77) *For estimating and appraising timber and other resources on the national forests preliminary to disposal by sale or to the issue of occupancy permits, and for emergency expenses incident to their sale or use [\$80,000] (acts Mar. 3, 1899, vol. 30, p. 1095, sec. 1; June 3, 1902, vol. 32, p. 295, sec. 1; Feb. 1, 1905, vol. 33, p. 268, sec. 1; June 11, 1906, vol. 34, p. 233, sec. 1; Mar. 1, 1911, vol. 36, p. 963, sec. 1; Mar. 4, 1913, vol. 37, p. 842, sec. 1; Mar. 4, 1915, vol. 38, p. 1099, sec. 1; May 31, 1920, vol. 41, pp. 706-711, sec. 1) -* 125, 000. 00

Appropriation for 1916.....	\$60, 000	Estimate for 1917.....	\$60, 000
Appropriation for 1917.....	60, 000	Estimate for 1918.....	70, 000
Appropriation for 1918.....	70, 000	Estimate for 1919.....	100, 000
Appropriation for 1919.....	100, 000	Estimate for 1920.....	80, 000
Appropriation for 1920.....	80, 000	Estimate for 1921.....	125, 000
Appropriation for 1921.....	80, 000	Estimate for 1922.....	125, 000

NOTE.—There is an increase in this item of \$45,000. Timber estimation and appraisal and grazing range reconnaissance are essential preliminaries to the disposal of timber and forage on a sound basis. Cruising is also essential for the making of plans for timber management which will safeguard the permanency of the industries dependent on the national forests.

The value of timber sold from the national forests was larger in 1920 than in 1919 by over \$900,000. The demand for timber surveys is greater than can be met without the requested increase in this appropriation. The active demand for pulp timber in Alaska requires at least \$25,000 of additional funds for cruising large areas and preparing sales. Many purchasers of saw timber are completing their sales contracts and want new ones, while new applications are constantly being received. This expansion involves unavoidable increases in the funds for surveys as well as for operating expenses.

There are many instances where live stock are now injuring the range, apparently because of faulty distribution. Undoubtedly many of these areas could carry more than the present number of stock without injury if better methods of distribution and management were practiced. In the absence of necessary reconnaissance work on individual grazing units, however, it is difficult or impossible to make satisfactory adjustments. Range reconnaissance usually shows increased financial returns far in excess of the amount expended because of the larger numbers of stock which can be carried through more effective distribution. In addition, direct benefit to the live-stock industry results through the increase in the number of stock that can be grazed on the national forests.

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
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General Expenses, Forest Service—Continued.

Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.
		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>
Salaries:				
Inspector (part time).....per annum..	\$3,000.00	1		
Inspector (part time).....do.....	2,700.00	1		
Examiner.....do.....	2,500.00	1		
Examiner.....do.....	2,400.00	2		
Examiner.....do.....	2,100.00	2		
Examiner (part time).....do.....	1,800.00	3	2	
Examiner.....do.....	1,740.00	4	2	2
Examiner.....do.....	1,600.00	3	3	1
Examiner.....do.....	1,500.00	3	4	3
Examiner.....do.....	1,400.00		3	2
Assistant.....do.....	1,200.00	7	3	3
Assistant (temporary).....do.....	1,100.00		2	
Timber cruiser (temporary).....do.....	1,500.00	6	2	
Surveyor (temporary).....do.....	1,800.00	2	1	
Surveyor (temporary).....do.....	1,500.00	1		
Transitmen, compassmen, draftsmen, clerks, and field assistants, \$125 to \$60.....per month..		48	26	30
Wages:				
Miscellaneous temporary labor, \$100 to \$60.....do.....		120	76	82
		198	124	123
Salaries.....		\$52,800.00	\$27,300.00	\$24,780.00
Wages.....		25,300.00	19,700.00	19,200.00
OTHER OBJECTS OF EXPENDITURE.				
Traveling expenses.....		22,500.00	14,200.00	12,900.00
Equipment and material.....		14,200.00	9,500.00	9,360.00
Miscellaneous items.....		10,200.00	9,300.00	9,911.00
Total.....		125,000.00	80,000.00	76,151.00

- (78) For other miscellaneous forest investigations, and for collating, digesting, recording, illustrating, and distributing the results of the experiments and investigations herein provided for **[\$31,280]** (*acts Mar. 3, 1899, vol. 30, p. 1095, sec. 1; June 3, 1902, vol. 32, p. 295, sec. 1; Feb. 1, 1905, vol. 33, p. 268, sec. 1; June 11, 1906, vol. 34, p. 233, sec. 1; Mar. 1, 1911, vol. 36, p. 963, sec. 1; Mar. 4, 1913, vol. 37, p. 842, sec. 1; Mar. 4, 1915, vol. 38, p. 1099, sec. 1; May 31, 1920, vol. 41, pp. 706-711, sec. 1*)..... **\$36,960.00**

Appropriation for 1912.....	\$33,760	Estimate for 1913.....	\$31,360
Appropriation for 1913.....	31,360	Estimate for 1914.....	40,160
Appropriation for 1914.....	40,160	Estimate for 1915.....	40,160
Appropriation for 1915.....	40,160	Estimate for 1916.....	40,160
Appropriation for 1916.....	40,160	Estimate for 1917.....	33,140
Appropriation for 1917.....	33,140	Estimate for 1918.....	33,140
Appropriation for 1918.....	33,140	Estimate for 1919.....	31,280
Appropriation for 1919.....	31,280	Estimate for 1920.....	31,280
Appropriation for 1920.....	31,280	Estimate for 1921.....	56,920
Appropriation for 1921.....	31,280	Estimate for 1922.....	36,960

NOTE.—The increase of \$5,680 recommended in this item is barely sufficient to meet the increased cost of photographic materials, engraving, map printing, labor, etc., and will not permit any expansion in the work. It will make it possible to keep the records, township plats, etc., up to date and provide for the proper handling and distribution of the results of experiments and investigations already under way.

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.					Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Forest Service—Continued.</i>						
Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.		
Salaries:		Number.	Number.	Number.		
Editor.....per annum	\$3,200.00	1	1	1		
Assistant editor.....do.	2,400.00	1				
Assistant editor.....do.	2,000.00		1	1		
Chief of publications.....do.	3,000.00	2				
Chief of publications.....do.	2,880.00		1	1		
Chief of publications.....do.	2,600.00		1	1		
Assistant.....do.	3,000.00	1				
Assistant.....do.	2,880.00		1			
Assistant (part time).....do.	2,500.00	1		1		
Assistant.....do.	2,100.00	1	1	1		
Geographer.....do.	2,200.00	1	1	1		
Statistician.....do.	2,100.00	1				
Statistician.....do.	1,800.00		1	1		
Civil engineer (part time).....do.	2,000.00	1	1	1		
Executive assistant.....do.	2,300.00	1				
Executive assistant (part time).....do.	2,100.00		1	1		
Photographer (temporary).....do.	1,400.00		1	1		
Map mounter (temporary).....do.	1,200.00		1	1		
Clerk (temporary).....do.	1,400.00	1				
		11	13	12		
Salaries.....		\$25,880.00	\$23,100.00	\$21,200.00		
OTHER OBJECTS OF EXPENDITURE.						
Traveling expenses.....		1,400.00	1,200.00	1,670.00		
Equipment and material.....		9,500.00	6,980.00	8,410.00		
Miscellaneous items.....		180.00				
Total.....		36,960.00	31,280.00	31,280.00		
(79) For the construction and maintenance of roads, trails, bridges, fire lanes, telephone lines, cabins, fences, and other improvements necessary for the proper and economical administration, protection, and development of the national forests, [\$400,000] \$500,000: <i>Provided, That the Secretary of Agriculture is authorized to use not to exceed \$5,000 of the funds herein appropriated for the purchase of lands needed for ranger stations: And provided, That thirty buildings may be erected at a cost of not to exceed \$3,000 each: Provided further, That not to exceed [\$50,000] \$100,000 may be expended for the construction and maintenance of boundary and range division fences, counting corrals, stock driveways and bridges, the development of stock watering places, and the eradication of poisonous plants on [the] those national forests whereon the receipts from grazing fees will be increased to an amount that will provide for reimbursement to the Treasury within seven years of the amounts expended hereunder: And provided further, That hereafter no part of any funds appropriated for the Forest Service shall be used to pay the transportation or traveling expenses of any forest officer or agent except he be traveling on business directly connected with the Forest Service and in furtherance of the works, aims, and objects specified and authorized by law: And provided also, That hereafter no part of any funds appropriated for the Forest Service shall be paid or used for the purpose of paying for, in whole or in part, the preparation or publication of any newspaper or magazine article, but this shall not prevent the giving out to all persons, without discrimination, including newspaper and magazine writers and publishers, of any facts or official information of value to the public (acts Mar. 3, 1899, vol. 30, p. 1095, sec. 1; June 3, 1902, vol. 32, p. 295, sec. 1; Feb. 1, 1905, vol. 33, p. 268, sec. 1; June 11, 1906, vol. 34, p. 233, sec. 1; Mar. 1, 1911, vol. 36, p. 963, sec. 1; Mar. 4, 1913, vol. 37, p. 842, sec. 1; Mar. 4, 1915, vol. 38, p. 1099, sec. 1; May 31, 1920, vol. 41, pp. 706-711, sec. 1)</i>					\$500,000.00	

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Forest Service—Continued.</i>		
Appropriation for 1913..... \$400,000	Estimate for 1914..... \$400,000	
Appropriation for 1914..... 400,000	Estimate for 1915..... 400,000	
Appropriation for 1915..... 400,000	Estimate for 1916..... 400,000	
Appropriation for 1916..... 400,000	Estimate for 1917..... 400,000	
Appropriation for 1917..... 400,000	Estimate for 1918..... 500,000	
Appropriation for 1918..... 450,000	Estimate for 1919..... 450,000	
Appropriation for 1919..... 450,000	Estimate for 1920..... 450,000	
Appropriation for 1920..... 450,000	Estimate for 1921..... 550,000	
Appropriation for 1921..... 400,000	Estimate for 1922..... 500,000	
<p>NOTE.—There is an increase in this item of \$100,000, which it is proposed to use as follows:</p> <p>(a) \$50,000 for the regular improvement work on the national forests. Adequate protection of the national forests requires that many miles of trails into back regions be kept clear of brush and slides, in order that these remote regions may be accessible in case of fire. For the same reason telephone lines, fire lookouts, and all other improvements must be kept in efficient condition. Because of the greatly increased cost of labor and materials, it is possible with the present appropriations to add but little to the existing improvements after unavoidable maintenance work is done. Proper protection and administration make it urgent that this fund be increased.</p> <p>(b) \$50,000 for range improvements. For the greater part the improvements so far made on the national forest ranges have been paid for by the stockmen themselves. These have covered only a small portion of the ranges but, nevertheless, have demonstrated the great increase in value which can be given to range lands by comparatively small expenditures. The time has come for the Government to do this work itself on a strict business basis. The productivity of the national forest ranges, both in revenue and live stock products, can be vastly increased by systematic construction of improvements and the eradication of poisonous weeds. Such improvements will immediately and largely increase the use value of the ranges; and, as proposed in the new language in the second proviso, should only be installed where the increased grazing receipts thus secured will return their cost within seven years. Since such increased revenues will be paid into the Treasury, this phase of the work will be self-sustaining within a few years.</p> <p>The language of the paragraph has been amended so as to authorize the expenditure of \$5,000 for the purchase of land for ranger stations. There is urgent need for a number of stations at points which are logical centers of business for ranger districts where no Government land is available and where it is impossible to lease lands for such purposes.</p> <p>Provision is also specifically made for the erection of 30 buildings at a cost of not to exceed \$3,000 each. Under existing law, the Secretary of Agriculture is authorized to construct buildings for official use at costs not to exceed \$1,000 each. The current high prices for materials and wages have, because of this limitation, prevented the construction of many buildings urgently needed in administering the business on the national forests. At most, \$1,000 will pay for the construction of not more than a 2-room dwelling, whereas a district headquarters to shelter a ranger and his family requires at least four rooms. Failure to provide adequate stations disrupts the morale of the service and reflects discredit upon the Government. Small lookout and patrol stations can be constructed within the present statutory limitation of \$1,000, but that amount is wholly inadequate for a forest nursery, an experiment station, or a permanent ranger's headquarters where a family must be housed and business conducted with forest users.</p> <p>The word "hereafter" has been inserted in the provisos prohibiting the use of Forest Service appropriations for the payment of traveling expenses except on official business and for payment for the preparation or publication of any newspaper or magazine article. These provisions have been included in the appropriation acts since 1911, and it is now proposed to make them permanent legislation so that it will not be necessary to repeat the language from year to year.</p>		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.					Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Forest Service—Continued.</i>						
Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.		
Salaries:		Number.	Number.	Number.		
Engineer.....per annum..	\$2,400.00	1	1	1		
Engineer.....do.....	2,100.00	2	1	1		
Engineer.....do.....	1,980.00	1	2	1		
Engineer.....do.....	1,680.00	1	1	1		
Examiner.....do.....	2,500.00	1	1	1		
Examiner.....do.....	2,500.00	1	1	1		
Examiner.....do.....	2,200.00	3		1		
Wages:						
Linemen, carpenters, blacksmiths, packers, teamsters, cooks, and laborers, \$7 to \$2.....per diem..		1,860	1,612	1,802		
		1,870	1,619	1,805		
Salaries.....		\$16,000.00	\$14,200.00	\$6,080.00		
Wages.....		233,600.00	197,900.00	217,360.00		
OTHER OBJECTS OF EXPENDITURE.						
Traveling expenses.....		9,500.00	6,400.00	3,628.00		
Equipment and material.....		212,000.00	160,600.00	171,200.00		
Miscellaneous items.....		28,900.00	20,900.00	45,170.00		
Total.....		500,000.00	400,000.00	443,438.00		
<i>Construction work contemplated, 1922.</i>						
Based on records and present market conditions of labor and material so far as practicable the average unit cost of construction work on the National Forest for 1922 are estimated as follows:						
Trails.....per mile..	\$130					
Telephone lines.....do....	110					
Fire breaks.....do....	175					
Fences.....do....	215					
Lookout structures.....each..	400					
Dwellings.....do....	1,500					
Barns.....do....	350					
Other buildings.....	140					
Corrals.....	285					
Bridges.....	900					
Water improvements.....	170					
<i>Construction work approved, 1921.</i>						
The following construction work has been approved from this appropriation:						
Trails, 490 miles.....	\$62,230					
Telephone lines, 710 miles.....	63,900					
Fire breaks, 9 miles.....	1,485					
Fences, 210 miles.....	45,150					
Lookout structures.....	10,400					
Dwellings, 42.....	40,600					
Barns, 31.....	10,230					
Other buildings, 176.....	23,056					
Corrals, 3.....	285					
Bridges, 2.....	1,800					
Water improvements.....	11,480					
<i>Construction work done, 1920.</i>						
Of this appropriation there was expended for construction work on National Forests as follows:						
Trails, 540 miles.....	\$59,400					
Telephone lines, 726 miles.....	58,080					
Fire breaks, 17 miles.....	2,210					
Fences, 253 miles.....	45,540					
Lookout structures ¹	10,286					
Dwellings, 62.....	37,200					
Barns, 38.....	9,880					
Other buildings, 282.....	25,380					
Corrals, 9.....	810					
Bridges, 7.....	5,130					
Water improvements, 175.....	22,750					
¹ Part of cost of construction paid from cooperative and other funds.						
In all, for general expenses.....					\$5,189,892.00	\$3,402,442.00

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.		Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
Appropriations for 1912..... \$3,214,420 Appropriations for 1913..... 3,107,285 Appropriations for 1914..... 3,160,119 Appropriations for 1915..... 3,243,096 Deficiency act..... 349,243 Appropriations for 1916..... 3,217,676 Deficiency act..... 57,300 Appropriations for 1917..... 3,188,415 Appropriations for 1918..... 3,374,475 Deficiency act..... 775,000 Appropriations for 1919..... 3,248,985 Appropriations for 1920..... 3,481,209 Appropriations for 1921..... 3,402,442	Estimates for 1913..... \$3,208,005 Estimates for 1914..... 3,198,939 Estimates for 1915..... 3,238,096 Estimates for 1916..... 3,212,676 Estimates for 1917..... 3,188,616 Estimates for 1918..... 3,340,775 Estimates for 1919..... 3,247,935 Estimates for 1920..... 3,541,209 Estimates for 1921..... 5,745,775 Estimates for 1922..... 5,189,892		
(80) To enable the Secretary of Agriculture more effectively to carry out the provisions of the act of Mar. 1, 1911 (Thirty-sixth Statutes, page 961), entitled "An act to enable any State to cooperate with any other State or States, or with the United States, for the protection of watersheds of navigable streams, and to appoint a commission for the acquisition of lands for the purpose of conserving the navigability of navigable rivers," [\$21,770] \$25,770 of the moneys appropriated therein, or for carrying out its purposes, shall be available for the employment of agents, title attorneys, clerks, assistants, and other labor, and for the purchase of supplies and equipment required for the purpose of said act in the city of Washington.			
NOTE.—The amount made available from the Weeks law fund for administrative expenses in Washington is changed from \$21,770 to \$25,770, an increase of \$4,000. The present limitation is found to be entirely inadequate. It has seriously retarded the work and made it necessary to call for assistance from employees paid from other funds in order to properly carry on these duties.			
(81) Hereafter, the Secretary of Agriculture is authorized to furnish subsistence to employees and to make deductions therefor from salary payments otherwise due such employees.			
NOTE.—Field parties employed in surveying, mapping, timber estimating, and similar work are ordinarily made up of temporary men at fixed wages plus subsistence provided in camp by the United States. It is necessary to include in such parties experienced men paid year-long salaries, which does not include subsistence except when travel is performed in connection with public business. A long assignment of such men to field parties necessitates their paying their own subsistence. Since a common mess is provided, the simplest way is to deduct the average cost of subsistence per man from each man's salary and use this fund to meet the expenses of the field party. Similarly, it is often necessary and desirable to pay the subsistence of employees assigned to timber sales and other work under circumstances which make the same procedure advisable. There is now no authority to take this action.			
<i>Statement of clerks employed in District of Columbia under lump-fund appropriations for 30 days or more during the fiscal year ended June 30, 1920 (32 Stat., p. 303).</i>			
GENERAL EXPENSES, FOREST SERVICE.			
1 clerk, \$1,400 per annum.			
1 clerk, \$1,200 per annum.			
FEDERAL FOREST ROAD CONSTRUCTION.			
1 clerk, \$1,500 per annum.			
1 clerk, \$1,300 per annum.			
Total for Forest Service.....		\$8,587,936.00	\$5,870,822.00

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
BUREAU OF CHEMISTRY.		
<i>Salaries, Bureau of Chemistry—</i>		
(1) One chemist, who shall be chief of bureau (increase of \$2,500) (<i>R. S.</i> , p. 87, secs. 520-523; <i>acts Apr. 14, 1896, vol. 29, p. 100, sec. 1; Mar. 2, 1901, vol. 31, p. 930, sec. 1; May 31, 1920, vol. 41, p. 711, sec. 1</i>) -----	\$7, 500. 00	
NOTE.—An increase of \$2,500 in the salary of the chief of bureau is recommended. See note under item 1, page 19.		
(2) One chief clerk (<i>same acts</i>) -----	2, 500. 00	
(3) One administrative assistant (<i>same acts</i>) -----	2, 500. 00	
(4) Five executive clerks, at \$2,000 each (increase of 2) (<i>same acts</i>) -----	10, 000. 00	
NOTE.—These new places, and those in items 5, 6, 9, 21, 22, 23, 26, 29, 38, and 43, are submitted in lieu of the places dropped in items 11, 12, 14, 17, 18, 24, 28, 30, 32, 33, 34, 35, 36, 37, 45, 47, 57, 58, and 59. In all, 54 clerical and subclerical positions, with salaries aggregating \$70,080, are submitted in lieu of 81 places involving \$73,460. This readjustment is recommended as a practicable means of increasing the efficiency of the clerical and subclerical force. A smaller number of higher-grade contented employees can perform more and better work than can a larger number of less efficient, dissatisfied, shifting employees. The average salary of the places dropped is \$907, while the average of the places submitted is \$1,298. Competent clerks can not be retained for lower salaries than those recommended. Because of the highly technical work of this bureau, clerks of more than average intelligence and ability are needed.		
(5) Sixteen clerks, class 4 (increase of 4) (<i>same acts</i>) -----	28, 800. 00	
NOTE.—See note under item 4.		
(6) Twenty-one clerks, class 3 (increase of 7) (<i>same acts</i>) -----	33, 600. 00	
NOTE.—See note under item 4.		
(7) One clerk (by transfer from lump fund) (<i>same acts</i>) -----	1, 500. 00	
(8) Three clerks, at \$1,440 each (<i>same acts</i>) -----	4, 320. 00	
(9) Thirty-nine clerks, class 2 (increase of 17, 2 by transfer from lump fund, and 15 new places) (<i>same acts</i>) -----	54, 600. 00	
NOTE.—See note under item 4.		
(10) One clerk (<i>same acts</i>) -----	1, 300. 00	
(11) Sixty clerks, class 1 (decrease of 15) (<i>same acts</i>) -----	72, 000. 00	
NOTE.—See note under item 4.		
(12) 【One clerk, \$1,100.】		
NOTE.—See note under item 4.		
(13) Thirteen clerks, at \$1,020 each (<i>same acts</i>) -----	13, 260. 00	
(14) 【Fifteen clerks, at \$1,000 each.】		
NOTE.—See note under item 4.		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>Salaries, Bureau of Chemistry—Continued.</i>		
(15) One machine operator (increase of \$100) (<i>R. S., p. 87, secs. 500-523; acts Apr. 14, 1896, vol. 29, p. 100, sec. 1; Mar. 2, 1901, vol. 31, p. 930, sec. 1; May 31, 1920, vol. 41, p. 711, sec. 1</i>) -----	\$1,200.00	
NOTE.—See note under item 16.		
(16) Two machine operators, at \$1,100 each (increase of \$100 each) (<i>same acts</i>) -----	2,200.00	
NOTE.—A promotion of \$100 is recommended for each of three machine operators of the bureau. These employees are engaged in the operation of photostat and multigraph machines and are highly proficient. The small increase in salary is fully merited and, if allowed, will provide compensation more nearly commensurate with the duties performed.		
(17) One clerk, \$960.		
NOTE.—See note under item 4.		
(18) Ten clerks, at \$900 each.		
NOTE.—See note under item 4.		
(19) Five wharf examiners, at \$1,600 each (by transfer from lump fund) (<i>same acts</i>) -----	8,000.00	
(20) Two food and drug inspectors, at \$2,500 each; 2 food and drug inspectors, at \$2,250 each; 1 food and drug inspector, \$2,120; 15 food and drug inspectors, at \$2,000 each; 15 food and drug inspectors, at \$1,800 each; 1 food and drug inspector, \$1,620; 13 food and drug inspectors, at \$1,600 each, and 2 food and drug inspectors, at \$1,400 each, transferred to lump fund.		
NOTE.—It is proposed to transfer these 51 food and drug inspectors, with salaries aggregating \$93,840, to the lump fund for the enforcement of the food and drugs act. These inspectors are strictly technical employees and should properly be carried on the lump fund. A technical knowledge of and experience in the food and drug industries are prerequisites to the taking of the civil-service examination for food and drug inspector. Many of these employees have had technical, professional, or scientific college training. On account of fluctuating salaries in the commercial world and a shifting personnel, it is highly important that the bureau have greater latitude in fixing the salaries of its technical force, in order that they may be varied from time to time to meet existing conditions and to retain efficient employees. This is impossible with an inflexible statutory roll.		
(21) One storekeeper (<i>submitted</i>) -----	1,600.00	
NOTE.—See note under item 4.		
(22) Eight laboratory helpers, at \$1,200 each (increase of 4) (<i>R. S., p. 87, secs. 520-523; acts Apr. 14, 1896, vol. 29, p. 100, sec. 1; Mar. 2, 1901, vol. 31, p. 930, sec. 1; May 31, 1920, vol. 41, p. 711, sec. 1</i>) -----	9,600.00	
NOTE.—See note under item 4.		
(23) Ten laboratory helpers, at \$1,020 each (increase of 9) (<i>same acts</i>) -----	10,200.00	
NOTE.—See note under item 4.		
(24) Five laboratory helpers, at \$1,000 each.		
NOTE.—See note under item 4.		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriation for the current fiscal year ending June 30, 1921.
<i>Salaries, Bureau of Chemistry—Continued.</i>		
(25) Four laboratory helpers, at \$960 each (<i>R. S., p. 87, sec. 520-523; Acts Apr. 14, 1896, vol. 29, p. 100, sec. 1; Mar. 2, 1901, vol. 31, p. 930, sec. 1; May 31, 1920, vol. 41, p. 711, sec. 1.</i>)	\$3,840.00	
(26) Five laboratory helpers, at \$900 each (increase of 2) (<i>same acts</i>)	4,500.00	
NOTE.—See note under item 4.		
(27) Eight laboratory helpers, at \$840 each (<i>same acts</i>)	6,720.00	
(28) Two laboratory helpers, at \$780 each.		
NOTE.—See note under item 4.		
(29) Six laboratory helpers or laborers, at \$780 each (<i>submitted</i>)	4,680.00	
NOTE.—See note under item 4.		
(30) One laborer, \$780.		
NOTE.—See note under item 4.		
(31) Twenty-seven laboratory helpers or laborers, at \$720 each (increase of 1 by transfer from lump fund) (<i>R. S., p. 87, secs. 520-523; acts Apr. 14, 1896, vol. 29, p. 100, sec. 1; Mar. 2, 1901, vol. 31, p. 930, sec. 1; May 31, 1920, vol. 41, p. 711, sec. 1.</i>)	19,440.00	
(32) Two laboratory helpers or laborers, at \$660 each.		
NOTE.—See note under item 4.		
(33) Fifteen laboratory helpers or laborers, at \$600 each (decrease of 12) (<i>same acts</i>)	9,000.00	
NOTE.—See note under item 4.		
(34) One laboratory assistant, \$1,200.		
NOTE.—See note under item 4.		
(35) One toolmaker, \$1,200.		
NOTE.—See note under item 4.		
(36) Four samplers, at \$1,200 each.		
NOTE.—See note under item 4.		
(37) One janitor, \$1,020.		
NOTE.—See note under item 4.		
(38) One skilled laborer (<i>submitted</i>)	1,020.00	
NOTE.—See note under item 4.		
(39) One mechanic (by transfer from lump fund) (<i>R. S., p. 87, secs. 520-523; acts Apr. 14, 1896, vol. 29, p. 100, sec. 1; Mar. 2, 1901, vol. 31, p. 930, sec. 1; May 31, 1920, vol. 41, p. 711, sec. 1.</i>)	2,280.00	

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.		Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>Salaries, Bureau of Chemistry—Continued.</i>			
(40)	Two mechanics, at \$1,800 each (increase of 1 by transfer from lump fund) (<i>R. S., p. 87, secs. 520-523; acts Apr. 14, 1896, vol. 29, p. 100, sec. 1; Mar. 2, 1901, vol. 31, p. 930, sec. 1; May 31, 1920, vol. 41, p. 711, sec. 1</i>)-----	\$3, 600. 00	
(41)	One mechanic (by transfer from lump fund) (<i>same acts</i>)-----	1, 620. 00	
(42)	Two mechanics, at \$1,400 each (<i>same acts</i>)-----	2, 800. 00	
(43)	Four mechanics, at \$1,200 each (increase of 3) (<i>same acts</i>) --	4, 800. 00	
	NOTE.—See note under item 4.		
(44)	One mechanic (<i>same acts</i>)-----	1, 020. 00	
(45)	【One mechanic, \$1,000.】		
	NOTE.—See note under item 4.		
(46)	One mechanic (<i>same acts</i>)-----	960. 00	
(47)	【One mechanic, \$900.】		
	NOTE.—See note under item 4.		
(48)	Two student assistants, at \$300 each (<i>same acts</i>)-----	600. 00	
(49)	Two messengers, at \$840 each (<i>same acts</i>)-----	1, 680. 00	
(50)	One skilled laborer (<i>same acts</i>)-----	1, 050. 00	
(51)	One skilled laborer (<i>same acts</i>)-----	900. 00	
(52)	One skilled laborer (<i>same acts</i>)-----	840. 00	
(53)	One messenger boy (<i>same acts</i>)-----	720. 00	
(54)	Eight messenger boys, at \$600 each (increase of 1 by transfer from lump fund) (<i>same acts</i>)-----	4, 800. 00	
(55)	Three messenger boys, at \$540 each (<i>same acts</i>)-----	1, 620. 00	
(56)	Six messenger boys, at \$480 each (<i>same acts</i>)-----	2, 880. 00	
(57)	【Three messenger boys, at \$420 each.】		
	NOTE.—See note under item 4.		
(58)	【Two messenger boys, at \$360 each.】		
	NOTE.—See note under item 4.		
(59)	Four laborers, at \$480 each (decrease of 3) (<i>same acts</i>)-----	1, 920. 00	
	NOTE.—See note under item 4.		
(60)	Thirteen charwomen, at \$240 each (<i>same acts</i>)-----	3, 120. 00	
	<div> <div> Appropriations for 1912.....\$242,190 Appropriations for 1913.....254,660 Appropriations for 1914.....273,860 Appropriations for 1915.....282,600 Appropriations for 1916.....291,540 Appropriations for 1917.....315,590 Appropriations for 1918.....362,990 Appropriations for 1919.....393,910 Appropriations for 1920.....411,670 Appropriations for 1921.....426,190 </div> <div> Estimates for 1913.....\$262,940 Estimates for 1914.....274,860 Estimates for 1915.....281,500 Estimates for 1916.....291,540 Estimates for 1917.....315,590 Estimates for 1918.....362,130 Estimates for 1919.....393,910 Estimates for 1920.....411,670 Estimates for 1921.....428,090 Estimates for 1922.....351,090 </div> </div>	\$351,090. 00	\$426,190. 00

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>Salaries, Bureau of Chemistry—Continued.</i>		
NOTE.—Apparent decrease, \$75, 100; actual decrease, \$580, as follows:		
<i>Promotions.</i>		
1 chief of bureau, from \$5,000 to \$7,500..... \$2, 500 1 machine operator, from \$1,100 to \$1,200..... 100 2 machine operators, from \$1,000 to \$1,100 each.. 200 \$2, 800		
<i>New places.</i>		
2 executive clerks, at \$2,000 each 4, 000 4 clerks, class 4..... 7, 200 7 clerks, class 3..... 11, 200 15 clerks, class 2..... 21, 000 1 storekeeper..... 1, 600 4 laboratory helpers, at \$1,200 each..... 4, 800 9 laboratory helpers, at \$1,020 each..... 9, 180 2 laboratory helpers, at \$900 each..... 1, 800 6 laboratory helpers or laborers, at \$780 each.. 4, 680 1 skilled laborer..... 1, 020 3 mechanics, at \$1,200 each..... 3, 600 70, 080		
54 \$72, 880		
<i>Places dropped.</i>		
15 clerks, class 1..... 18, 000 1 clerk..... 1, 100 15 clerks, at \$1,000 each..... 15, 000 1 clerk..... 960 10 clerks, at \$900 each..... 9, 000 5 laboratory helpers, at \$1,000 each..... 5, 000 2 laboratory helpers, at \$780 each..... 1, 560 1 laborer..... 780 2 laboratory helpers or laborers, at \$660 each.. 1, 320 12 laboratory helpers or laborers, at \$600 each.. 7, 200 1 laboratory assistant..... 1, 200 1 toolmaker..... 1, 200 4 samplers, at \$1,200 each..... 4, 800 1 janitor..... 1, 020 1 mechanic..... 1, 000 1 mechanic..... 900 3 messenger boys, at \$420 each..... 1, 260 2 messenger boys, at \$360 each..... 720 3 laborers, at \$480 each..... 1, 440 73, 460		
81 580		
<i>Transfers to lump fund for enforcement of food and drugs act, and the statutory roll correspondingly reduced.</i>		
2 food and drug inspectors, at \$2,500 each.... \$5, 000 2 food and drug inspectors, at \$2,250 each.... 4, 500 1 food and drug inspector..... 2, 120 15 food and drug inspectors, at \$2,000 each.... 30, 000 15 food and drug inspectors, at \$1,800 each.... 27, 000 1 food and drug inspector..... 1, 620 13 food and drug inspectors, at \$1,600 each.... 20, 800 2 food and drug inspectors, at \$1,400 each.... 2, 800 93, 840		
<i>Transfers from lump funds, which funds have been correspondingly reduced.</i>		
1 clerk..... 1, 500 2 clerks, class 2..... 2, 800 5 wharf examiners, at \$1,600 each..... 8, 000 1 laboratory helper or laborer..... 720 1 mechanic..... 2, 280 1 mechanic..... 1, 800 1 mechanic..... 1, 620 1 messenger boy..... 600 19, 320		
..... 74, 520		
Apparent decrease..... 75, 100		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.																																
<i>General Expenses, Bureau of Chemistry—</i>																																		
<p>(61) For all necessary expenses, for chemical apparatus, chemicals and supplies, repairs to apparatus, gas, electric current, official traveling expenses, telegraph and telephone service, express and freight charges, for the employment of such assistants, clerks, and other persons as the Secretary of Agriculture may consider necessary for the purposes named, in the city of Washington and elsewhere, in conducting investigations; collecting, reporting, and illustrating the results of such investigations; and for rent outside of the District of Columbia, <i>including cooperation with such persons, associations, or corporations as may be found necessary</i> for carrying out the investigations and work herein authorized, as follows (<i>acts June 3, 1902, vol. 32, p. 303, sec. 1; June 30, 1906, vol. 34, pp. 768-770, sec. 1; May 31, 1920, vol. 41, pp. 711-713, sec. 1</i>):</p> <p>NOTE.—This paragraph has been amended by inserting the words “including cooperation with such persons, associations, or corporations as may be found necessary” after the words “District of Columbia.” Practically all the investigational and experimental work of the Bureau of Chemistry is done in cooperation with the industries. Several of the subappropriations under “General expenses” already carry specific authority for conducting the work cooperatively, but its absence in other paragraphs might be held to mean that Congress did not intend that the work should be done cooperatively in the latter cases. In order to clear away any doubt on this point, it is recommended that the proposed change in language be made.</p>																																		
<p>(62) For conducting the investigations contemplated by the act of May 15, 1862, relating to the application of chemistry to agriculture; for the biological investigation of food and drug products and substances used in the manufacture thereof, including investigations of the physiological effects of such products on the human organism [\$70,400] <i>(same acts)</i>\$100,400.00</p> <table><tr><td>Appropriation for 1914.....</td><td>\$65,000</td><td>Estimate for 1915.....</td><td>\$52,400</td></tr><tr><td>Appropriation for 1915.....</td><td>52,400</td><td>Estimate for 1916.....</td><td>44,400</td></tr><tr><td>Appropriation for 1916.....</td><td>42,400</td><td>Estimate for 1917.....</td><td>42,400</td></tr><tr><td>Appropriation for 1917.....</td><td>42,400</td><td>Estimate for 1918.....</td><td>42,400</td></tr><tr><td>Appropriation for 1918.....</td><td>42,400</td><td>Estimate for 1919.....</td><td>42,400</td></tr><tr><td>Appropriation for 1919.....</td><td>42,400</td><td>Estimate for 1920.....</td><td>42,400</td></tr><tr><td>Appropriation for 1920.....</td><td>42,400</td><td>Estimate for 1921.....</td><td>42,400</td></tr><tr><td>Appropriation for 1921.....</td><td>70,400</td><td>Estimate for 1922.....</td><td>100,400</td></tr></table>	Appropriation for 1914.....	\$65,000	Estimate for 1915.....	\$52,400	Appropriation for 1915.....	52,400	Estimate for 1916.....	44,400	Appropriation for 1916.....	42,400	Estimate for 1917.....	42,400	Appropriation for 1917.....	42,400	Estimate for 1918.....	42,400	Appropriation for 1918.....	42,400	Estimate for 1919.....	42,400	Appropriation for 1919.....	42,400	Estimate for 1920.....	42,400	Appropriation for 1920.....	42,400	Estimate for 1921.....	42,400	Appropriation for 1921.....	70,400	Estimate for 1922.....	100,400		
Appropriation for 1914.....	\$65,000	Estimate for 1915.....	\$52,400																															
Appropriation for 1915.....	52,400	Estimate for 1916.....	44,400																															
Appropriation for 1916.....	42,400	Estimate for 1917.....	42,400																															
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Appropriation for 1919.....	42,400	Estimate for 1920.....	42,400																															
Appropriation for 1920.....	42,400	Estimate for 1921.....	42,400																															
Appropriation for 1921.....	70,400	Estimate for 1922.....	100,400																															
<p>NOTE.—There is an increase in this item of \$30,000, with which it is proposed to extend the protein investigations and the investigations of straw gas.</p> <p>Studies regarding the feeding value of the proteins of various stock feeds have already developed knowledge of great value in determining more efficient and more economical rations for stock. Proteins of other substances which may be used to supplement the feeds now in use should be investigated. These investigations have produced results of value also in human nutrition. Information regarding the little known vitamins, which are essential to health and growth, is being developed. It is also desired to extend the animal feeding experiments.</p> <p>Methods of the manufacture of gas for heat, light, and power on the farm from waste agricultural products, such as straw, corn stalks, corn cobs, cane trash, leaves, and other waste materials, have been studied on a small scale. This investigation promises to be of value to those sections of the country which produce straw and other waste vegetation in large quantities. The project can not be pushed vigorously because of insufficient funds, but with an additional \$10,000 much could be accomplished. It is proposed to experiment with the design, construction, and development of a practicable straw-gas unit, in order to determine the value and utilization of by-product of the process, the value of straw gas as a motive power, and the possibilities of baling and briquetting straw and similar material on the farm.</p>																																		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.					Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Bureau of Chemistry—Continued.</i>						
Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.		
Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>		
Chemist in charge.....per annum..	\$4,000.00	1	1	1		
Chemist in charge.....do.....	3,780.00	1	1	1		
Chemist in charge.....do.....	3,540.00	1	1	1		
Chemist in charge.....do.....	3,240.00	1	1	2		
Chemist in charge.....do.....	3,000.00	1	1	1		
Chemist in charge.....do.....	2,760.00	1	1	1		
Chemist.....do.....	3,780.00	1	1	1		
Chemist.....do.....	3,000.00	2	2	1		
Chemist.....do.....	2,760.00	1	1	1		
Chemist.....do.....	2,520.00	2	2	3		
Chemist.....do.....	2,280.00	2	1	2		
Chemist.....do.....	2,040.00	4	4	2		
Chemist.....do.....	1,800.00	8	4	6		
Chemist.....do.....	1,620.00	5	3	1		
Chemist.....do.....	1,440.00	5	1	8		
Chemist.....do.....	1,400.00	2	1	1		
Mycologist.....do.....	2,040.00	1	1	1		
Assistant.....do.....	2,280.00	1	1	1		
Assistant.....do.....	2,160.00	1	1	1		
Assistant (temporary), \$1,800 to \$1,080.....do.....				4		
Laboratorian.....do.....	1,440.00	2	2	1		
Laboratorian.....do.....	1,200.00			2		
Specialist.....do.....	1,800.00			1		
Aid.....do.....	900.00			2		
Mechanic.....do.....	1,620.00		1	1		
Clerk.....do.....	1,400.00			1		
Investigator (temporary).....per month..	150.00			1		
Wages:						
Laborer (temporary).....per annum..	\$40.00			1		
		40	30	43		
Salaries.....		\$70,000.00	\$50,705.00	\$48,605.32		
Wages.....				268.34		
OTHER OBJECTS OF EXPENDITURE.						
Traveling expenses.....		10,300.00	6,400.00	4,483.64		
Equipment and material.....		15,800.00	10,800.00	10,336.78		
Telephone and telegraph service.....		900.00	595.00	688.75		
Miscellaneous items.....		3,400.00	1,900.00	1,888.79		
Total.....		100,400.00	70,400.00	66,271.62		
(63) For collaboration with other departments of the Government desiring chemical investigations and whose heads request the Secretary of Agriculture for such assistance, and for other miscellaneous work (<i>acts June 3, 1902, vol. 32, p. 303, sec. 1; June 30, 1906, vol. 34, pp. 768-770, sec. 1; May 31, 1920, vol. 41, pp. 711-713, sec. 1</i>)					\$14,000.00	
Appropriation for 1914.....	\$44,000	Estimate for 1915.....	\$14,000			
Appropriation for 1915.....	14,000	Estimate for 1916.....	14,000			
Appropriation for 1916.....	14,000	Estimate for 1917.....	14,000			
Appropriation for 1917.....	14,000	Estimate for 1918.....	14,000			
Appropriation for 1918.....	14,000	Estimate for 1919.....	14,000			
Appropriation for 1919.....	14,000	Estimate for 1920.....	14,000			
Appropriation for 1920.....	14,000	Estimate for 1921.....	50,000			
Appropriation for 1921.....	14,000	Estimate for 1922.....	14,000			
Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.		
Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>		
Chemist in charge.....per annum..	\$4,000.00	1	1	1		
Chemist in charge.....do.....	3,540.00	1	1	1		
Chemist in charge.....do.....	3,240.00			1		
Engineer in charge.....do.....	3,240.00		1	1		
Engineer in charge.....do.....	3,000.00			1		
Chemist.....do.....	2,520.00			1		
Chemist.....do.....	2,280.00			1		
Chemist.....do.....	2,040.00		1	1		
Chemist.....do.....	1,800.00	3	1	3		
Chemist.....do.....	1,620.00	1		1		
Assistant.....do.....	2,160.00		2	1		
Assistant, temporary.....do.....	1,560.00			1		
		6	7	8		
Salaries.....		\$11,560.00	\$11,670.00	\$12,846.00		
OTHER OBJECTS OF EXPENDITURE.						
Traveling expenses.....		640.00	500.00	5.45		
Equipment and material.....		1,200.00	1,320.00	389.90		
Miscellaneous items.....		600.00	510.00	7.00		
Total.....		14,000.00	14,000.00	13,248.35		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.		
<i>General Expenses, Bureau of Chemistry—Continued.</i>				
(64) For investigating the handling, grading, packing, canning, freezing, storing and transportation of poultry, eggs, fish, shrimp, oysters, and other shell fish, and for experimental shipments of these products, for the utilization of waste products, and the development of new sources of food (<i>acts June 3, 1902, vol. 32, p. 303, sec. 1; June 30, 1906, vol. 34, pp. 768-770, sec. 1; May 31, 1920, vol. 41, pp. 711-713, sec. 1</i>) -----	\$52, 880.00			
Appropriation for 1914..... \$50,000	Estimate for 1915..... \$50,000			
Appropriation for 1915..... 50,000	Estimate for 1916..... 49,400			
Appropriation for 1916..... 40,000	Estimate for 1917..... 49,000			
Appropriation for 1917..... 40,000	Estimate for 1918..... 50,000			
Appropriation for 1918..... 40,000	Estimate for 1919..... 40,000			
Appropriation for 1919..... 40,000	Estimate for 1920..... 50,000			
Appropriation for 1920..... 45,000	Estimate for 1921..... 42,880			
Appropriation for 1921..... 52,880	Estimate for 1922..... 52,880			
NOTE.—While there is apparently no change in the amount of this item, there is an actual increase of \$720, due to the transfer of one laboratory helper or laborer to the statutory roll.				
Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.
Salaries:		Number.	Number.	Number.
Chief of laboratory (temporary), per annum.....	\$3,780.00	1	1	1
Chief of laboratory (temporary).....do.....	3,000.00	1	1	1
Chief of laboratory.....do.....	2,760.00	1	1	1
Chemist in charge.....do.....	3,240.00	1	1	1
Chemist.....do.....	2,760.00	1	1	1
Chemist.....do.....	2,760.00	1	1	1
Chemist.....do.....	2,500.00	1	1	1
Chemist.....do.....	2,040.00	2	2	1
Chemist.....do.....	1,800.00	1	1	2
Chemist.....do.....	1,620.00	2	2	2
Chemist (temporary).....do.....	1,440.00	1	1	1
Bacteriologist.....do.....	2,520.00	1	1	2
Bacteriologist.....do.....	2,280.00	1	1	1
Bacteriologist.....do.....	2,040.00	1	1	1
Investigator (temporary).....do.....	2,400.00	1	1	1
Investigators (temporary).....do.....	1,440.00	1	1	2
Assistant.....do.....	2,040.00	1	1	1
Assistant.....do.....	1,800.00	1	1	1
Assistant.....do.....	1,620.00	5	5	3
Assistant.....do.....	1,440.00	1	1	3
Assistant.....do.....	1,200.00	1	1	7
Draftsman.....do.....	1,200.00	1	1	1
Draftsman (temporary).....do.....	1,000.00	1	1	1
Clerk (temporary).....do.....	1,400.00	1	1	1
Photostat operator (temporary).....do.....	1,000.00	1	1	1
Artist.....per diem.....	9.00	1	1	1
Draftsman and laboratory helper (temporary), \$960 to \$720....per annum.....				3
Wages:				
Laborer.....do.....	720.00	1	1	1
		20	21	40
Salaries.....		\$37,500.00	\$37,500.00	\$36,173.38
Wages.....		720.00	720.00	720.00
OTHER OBJECTS OF EXPENDITURE.				
Traveling expenses.....		6,170.00	6,170.00	12,415.47
Equipment and material.....		3,950.00	3,950.00	6,472.42
Telephone and telegraph service.....		400.00	400.00	466.03
Miscellaneous items.....		4,140.00	4,140.00	5,655.91
Total.....		52,880.00	52,880.00	61,858.21
(65) For investigation and experiment in the utilization, for coloring, medicinal, and technical purposes, of raw materials grown or produced in the United States, in cooperation with such persons, associations, or corporations as may be found necessary, including repairs, alterations, improvements, or additions to a building on the Arlington Experimental Farm [\$68,260] (<i>same acts</i>) -----	89, 960.00			
Appropriation for 1917..... \$50,000	Estimate for 1918..... \$49,400			
Appropriation for 1918..... 49,400	Estimate for 1919..... 70,720			
Appropriation for 1919..... 70,720	Estimate for 1920..... 100,000			
Appropriation for 1920..... 100,000	Estimate for 1921..... 99,280			
Appropriation for 1921..... 68,260	Estimate for 1922..... 89,960			

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
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General Expenses, Bureau of Chemistry—Continued.

NOTE.—There is an apparent increase in this item of \$21,700, but, taking into consideration the transfer to the statutory roll of 1 clerk, class 2, 1 mechanic, \$2,280, and 1 mechanic, \$1,620, aggregating \$5,300, the actual increase is \$27,000. This appropriation was reduced over \$31,000 by the last Congress. The increase requested for next year, therefore, merely restores the item to approximately its 1920 status.

With present funds it is possible to operate the color laboratory of the Bureau of Chemistry, located at Arlington Farm, part time only and then below its capacity. This makes the overhead expenses higher in proportion to the output than would be the case if the plant were operated on the scale for which it was planned and built. Because of the high cost of all items entering into the operation of the plants, the additional amount requested will be necessary to conduct the work on an adequate scale. The result already obtained are worth to the country many times what the work has cost since its inception. One of some fifteen processes developed has made it possible to establish in the United States an industry for the manufacture of a dye intermediate which formerly was imported from Germany. This product is now being sold in Europe by American manufacturers in direct competition with Germany.

The language of the paragraph has been amended by the insertion of the words "medicinal, and technical." Many of the products made from coal tar in the manufacture of dyes are used for medicinal and technical purposes, and it is important that methods for their manufacture be developed simultaneously with methods for the manufacture of dyes. In fact, a dye industry can be developed economically only by manufacturing all the products which can be made from the raw materials used in making dyes. One reason why the German manufacturers were able to maintain a practical monopoly in the manufacture of many coal tar materials was because they made at the same time and from the same raw products a great variety of substances other than dyes, which greatly increased the revenue and reduced the cost of manufacturing the dyes.

Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.
Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>
Chemist in charge (temporary) .per annum.	\$3,500.00			1
Chemist.....do.....	4,260.00	1	1	
Chemist.....do.....	3,780.00			1
Chemist.....do.....	3,240.00	1	1	
Chemist.....do.....	2,760.00	2	2	
Chemist.....do.....	2,520.00	1	1	3
Chemist.....do.....	2,280.00	3	3	4
Chemist.....do.....	2,040.00	5	5	4
Chemist.....do.....	1,800.00	2	2	6
Chemist.....do.....	1,620.00	7	1	1
Chemist.....do.....	1,440.00	4		
Crystallographer.....do.....	3,000.00	1	1	1
Assistant (temporary).....do.....	1,800.00			1
Instrument maker.....do.....	2,280.00	1	1	
Instrument maker.....do.....	2,040.00			1
Editor.....do.....	2,040.00		1	1
Clerk (temporary).....do.....	1,800.00			1
Clerk (temporary).....do.....	1,400.00		1	
Laboratorian.....do.....	1,200.00	1	1	1
Multigraph operator (temporary).....do.....	1,200.00		1	
Multigraph operator (temporary).....do.....	1,100.00			1
Wages:				
Mechanic (temporary), \$1,800 to \$1,620.....do.....			3	
Carpenter, (temporary).....per diem.....	7.00	4	4	1
Electrician (temporary), \$8 to \$4.50.....do.....		3	4	4
Laborer.....do.....per annum.....	720.00			1
		36	33	33
Salaries.....		\$54,000.00	\$37,750.00	\$30,390.04
Wages.....		4,200.00	6,025.00	2,290.50
OTHER OBJECTS OF EXPENDITURE.				
Traveling expenses.....		2,600.00	2,000.00	452.29
Equipment and material.....		25,400.00	19,845.00	59,543.82
Miscellaneous items.....		3,760.00	2,640.00	442.05
Construction work.....				14,256.00
Total.....		89,960.00	68,260.00	97,374.70

¹ This construction work consisted of the following:

Additions to concrete building at Arlington Farm, Va., used as color experimental plant—1 stack, 4 feet in diameter, 35 feet high, with 1 blower fan.
1 high speed engine, and 1 electric motor \$4,256.00

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.																																																																																																																			
<i>General Expenses, Bureau of Chemistry—Continued.</i>																																																																																																																					
(66) For the investigation and development of methods for the manufacture of table sirup <i>and sugar</i> , and of methods for the manufacture of sweet sirups by the utilization of new agricultural sources, [\$15,000] \$35,000: <i>Provided</i> , That \$7,500 of said amount may be used for investigation and experimenting in production of sirups, sugar, starch, dextrine, and other commercial products from the sweet potato (<i>acts June 3, 1902, vol. 32, p. 303, sec. 1; June 30, 1906, vol. 34, pp. 768-770, sec. 1; May 31, 1920, vol. 41, pp. 711-713, sec. 1</i>) -----	\$35,000.00																																																																																																																				
Appropriation for 1918..... \$7,000	Estimate for 1919..... \$7,000																																																																																																																				
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Appropriation for 1921..... 15,000	Estimate for 1922..... 35,000																																																																																																																				
<p>NOTE.—There is an increase in this item of \$20,000. The work conducted by the Bureau of Chemistry during the past few years on the manufacture of cane sirup has covered (1) the concentration of a sirup of higher density, thereby reducing the tendency to ferment without at the same time permitting crystallization; (2) study of methods of clarifying cane juice; and (3) organization of cooperative sirup canneries. It is still necessary to work out the details for the construction and operation of a model sirup mill embracing the features developed as a result of the department's work and to properly correlate them with other features of mill practice. A very large proportion of the inquiries received by the department relative to cane sirup have reference to this question, and it is highly desirable that the cane sirup work be extended along this line.</p> <p>The studies relating to the clarification of cane sirup are directly applicable also to various problems pertaining to the manufacture of sugar. It is therefore desired to extend the work already completed to include sugar manufacture. The language of the item has accordingly been amended by the insertion of the words "and sugar" following the words "table sirup."</p> <p>Radical modifications in methods at present in use in Louisiana for the manufacture of cane sugar are now being proposed, the tendency being to replace chemical methods, such as the lime-sulphur method, by those of a more mechanical and physical character, such as preliminary treatment with infusorial earth followed by treatment with a decolorizing carbon. The work so far done on cane sirup production is directly in line with this innovation, and it is very desirable that the department take advantage of the work done on cane sirup and the bearing which this work has upon recent developments in methods of sugar production. In order to do this it will be necessary to have an increased appropriation.</p> <p>Some of the information already accumulated can also be applied with profit to beet-sugar manufacture. The fullest possible application should be made of the data at hand. The clarification of beet diffusion juice and, in connection with the use of frozen and thawed beets, the question of excessive production of discard molasses are problems that should be investigated.</p>																																																																																																																					
<table><thead><tr><th>Employees.</th><th>Rate.</th><th>Estimated, 1922.</th><th>Appropriated, 1921.</th><th>Expended, 1920.</th></tr><tr><td>Salaries:</td><td></td><td>Number.</td><td>Number.</td><td>Number.</td></tr></thead><tbody><tr><td>Chemist in charge.....per annum..</td><td>\$3,240.00</td><td>1</td><td>1</td><td></td></tr><tr><td>Chemist in charge.....do.....</td><td>3,000.00</td><td></td><td></td><td>1</td></tr><tr><td>Chemist in charge.....do.....</td><td>2,700.00</td><td>1</td><td>1</td><td></td></tr><tr><td>Chemist.....do.....</td><td>1,800.00</td><td>1</td><td>1</td><td></td></tr><tr><td>Chemist.....do.....</td><td>1,620.00</td><td>1</td><td>1</td><td>1</td></tr><tr><td>Chemist.....do.....</td><td>1,440.00</td><td>4</td><td>1</td><td>1</td></tr><tr><td>Chemist (temporary).....do.....</td><td>1,400.00</td><td>1</td><td>1</td><td>1</td></tr><tr><td>Chemist (temporary).....per diem..</td><td>10.00</td><td>1</td><td></td><td>1</td></tr><tr><td>Chemist.....do.....</td><td>7.00</td><td></td><td>1</td><td>1</td></tr><tr><td>Scientific assistant.....per annum..</td><td>2,280.00</td><td>2</td><td>1</td><td></td></tr><tr><td>Scientific assistant.....do.....</td><td>2,040.00</td><td>1</td><td>1</td><td>1</td></tr><tr><td>Laboratorian.....do.....</td><td>1,440.00</td><td>2</td><td>2</td><td>1</td></tr><tr><td>Photostat operator.....do.....</td><td>1,000.00</td><td></td><td></td><td>1</td></tr><tr><td>Clerk (temporary).....do.....</td><td>1,400.00</td><td></td><td></td><td>1</td></tr><tr><td></td><td></td><td>15</td><td>11</td><td>110</td></tr><tr><td>Salaries.....</td><td></td><td>\$23,180.00</td><td>\$10,800.00</td><td>\$7,167.22</td></tr><tr><td colspan="5">OTHER OBJECTS OF EXPENDITURE.</td></tr><tr><td>Traveling expenses.....</td><td></td><td>3,000.00</td><td>2,000.00</td><td>1,281.11</td></tr><tr><td>Equipment and material.....</td><td></td><td>7,470.00</td><td>1,750.00</td><td>1,130.20</td></tr><tr><td>Miscellaneous items.....</td><td></td><td>1,350.00</td><td>450.00</td><td>81.38</td></tr><tr><td>Total.....</td><td></td><td>35,000.00</td><td>15,000.00</td><td>9,659.91</td></tr></tbody></table>	Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.	Salaries:		Number.	Number.	Number.	Chemist in charge.....per annum..	\$3,240.00	1	1		Chemist in charge.....do.....	3,000.00			1	Chemist in charge.....do.....	2,700.00	1	1		Chemist.....do.....	1,800.00	1	1		Chemist.....do.....	1,620.00	1	1	1	Chemist.....do.....	1,440.00	4	1	1	Chemist (temporary).....do.....	1,400.00	1	1	1	Chemist (temporary).....per diem..	10.00	1		1	Chemist.....do.....	7.00		1	1	Scientific assistant.....per annum..	2,280.00	2	1		Scientific assistant.....do.....	2,040.00	1	1	1	Laboratorian.....do.....	1,440.00	2	2	1	Photostat operator.....do.....	1,000.00			1	Clerk (temporary).....do.....	1,400.00			1			15	11	110	Salaries.....		\$23,180.00	\$10,800.00	\$7,167.22	OTHER OBJECTS OF EXPENDITURE.					Traveling expenses.....		3,000.00	2,000.00	1,281.11	Equipment and material.....		7,470.00	1,750.00	1,130.20	Miscellaneous items.....		1,350.00	450.00	81.38	Total.....		35,000.00	15,000.00	9,659.91		
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Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.																																								
<i>General Expenses, Bureau of Chemistry—Continued.</i>																																										
<p>(67) For enabling the Secretary of Agriculture to carry into effect the provisions of the act of June 30, 1906, entitled "An act for preventing the manufacture, sale, or transportation of adulterated, or misbranded, or poisonous, or deleterious foods, drugs, medicines, and liquors, and for regulating traffic therein, and for other purposes"; to cooperate with associations and scientific societies in the revision of the United States Pharmacopœia and development of methods of analysis, and for investigating the character of the chemical and physical tests which are applied to American food products in foreign countries, and for inspecting the same before shipment when desired by the shippers or owners of these products intended for countries where chemical and physical tests are required before the said products are allowed to be sold therein, [\$579,361] \$763,401: <i>Provided</i>, That not more than \$4,280 shall be used for travel outside of the United States (<i>acts June 3, 1902, vol. 32, p. 303, sec 1; June 30, 1906, vol. 34, pp. 768-770, sec. 1; May 31, 1920, vol. 41, pp. 711-713, sec. 1</i>) -----</p> <table> <tr> <td>Appropriation for 1912.....</td> <td>\$610,110</td> <td>Estimate for 1913.....</td> <td>\$625,000</td> </tr> <tr> <td>Appropriation for 1913.....</td> <td>625,000</td> <td>Estimate for 1914.....</td> <td>743,000</td> </tr> <tr> <td>Appropriation for 1914.....</td> <td>675,000</td> <td>Estimate for 1915.....</td> <td>654,301</td> </tr> <tr> <td>Appropriation for 1915.....</td> <td>644,301</td> <td>Estimate for 1916.....</td> <td>645,161</td> </tr> <tr> <td>Appropriation for 1916.....</td> <td>635,161</td> <td>Estimate for 1917.....</td> <td>657,951</td> </tr> <tr> <td>Appropriation for 1917.....</td> <td>632,951</td> <td>Estimate for 1918.....</td> <td>623,521</td> </tr> <tr> <td>Appropriation for 1918.....</td> <td>623,521</td> <td>Estimate for 1919.....</td> <td>589,081</td> </tr> <tr> <td>Appropriation for 1919.....</td> <td>589,081</td> <td>Estimate for 1920.....</td> <td>620,221</td> </tr> <tr> <td>Appropriation for 1920.....</td> <td>620,221</td> <td>Estimate for 1921.....</td> <td>605,081</td> </tr> <tr> <td>Appropriation for 1921.....</td> <td>579,361</td> <td>Estimate for 1922.....</td> <td>763,401</td> </tr> </table>	Appropriation for 1912.....	\$610,110	Estimate for 1913.....	\$625,000	Appropriation for 1913.....	625,000	Estimate for 1914.....	743,000	Appropriation for 1914.....	675,000	Estimate for 1915.....	654,301	Appropriation for 1915.....	644,301	Estimate for 1916.....	645,161	Appropriation for 1916.....	635,161	Estimate for 1917.....	657,951	Appropriation for 1917.....	632,951	Estimate for 1918.....	623,521	Appropriation for 1918.....	623,521	Estimate for 1919.....	589,081	Appropriation for 1919.....	589,081	Estimate for 1920.....	620,221	Appropriation for 1920.....	620,221	Estimate for 1921.....	605,081	Appropriation for 1921.....	579,361	Estimate for 1922.....	763,401	\$763,401.00	
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Appropriation for 1921.....	579,361	Estimate for 1922.....	763,401																																							

NOTE.—There is an apparent increase in this item of \$184,040, but, taking into consideration the transfer to the statutory roll of 5 wharf examiners, at \$1,600 each, and 1 mechanic, \$1,800, aggregating \$9,800, and the transfer to this item from the statutory roll (see item 20) of 51 food and drug inspectors, with salaries aggregating \$93,840, the actual increase is only \$100,000.

This appropriation was reduced \$30,000 by the last Congress. It has, as a result, been necessary to curtail the work at the very time when the removal of war restraints and the increased cost of all ingredients entering into the manufacture of foods and drugs has made adulteration and misbranding more profitable to the unscrupulous dealer than at any time since the pure food law was enacted. It is essential, both for the protection of consumers and for promoting fair trading within the food industries, that the inspection work be complete. It is not possible or necessary to inspect all food that enters interstate or foreign commerce, but it is of the utmost importance that all shipments which are likely to be in violation of the law be inspected regularly. In no other way can the law be enforced. Because of the development of a more efficient organization and system, the work has been maintained on a satisfactory basis until this year, when the loss of a large number of the most experienced inspectors and chemists, together with decreased appropriations and increased costs, have forced the department to narrow the range of inspection below the safe limit. The increase recommended will be absolutely necessary to restore the work to that standard of efficiency which has been maintained heretofore and to adequately protect the public from adulterated and misbranded foods and drugs.

Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.
Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>
Assistant chief.....per annum..	\$4,500.00	1	1	1
Assistant, temporary.....do.....	2,750.00	.....	.....	1
Chief of district.....do.....	4,500.00	1	1	.....
Chief of district.....do.....	4,200.00	.....	.....	1
Chief of district.....do.....	4,000.00	1	1	.....
Chief of district.....do.....	3,780.00	1	1	2
Chief of district.....do.....	3,500.00	.....	.....	1
Chemist in charge of laboratory.....do.....	4,500.00	.....	.....	1
Chemist in charge of laboratory.....do.....	4,000.00	2	2	1
Chemist in charge of laboratory.....do.....	3,780.00	1	1	1
Chemist in charge of laboratory.....do.....	3,540.00	2	2	.....

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.					Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Bureau of Chemistry—Continued.</i>						
Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.		
Salaries—Continued.		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>		
Chemist in charge of laboratory per annum.	\$3,500.00	1	1	2		
Chemist in charge of laboratory.....do.....	3,240.00	6	6	2		
Chemist in charge of laboratory.....do.....	3,000.00	1	2	7		
Chemist in charge of laboratory.....do.....	2,520.00			1		
Assistant solicitor.....do.....	4,000.00		1			
Chief of station.....do.....	3,780.00	1	1			
Chief of station.....do.....	3,480.00			1		
Chief of station (temporary).....do.....	3,240.00			1		
Chief of station.....do.....	3,000.00	4	4	3		
Chief of station.....do.....	2,760.00	5	5	3		
Chief of station.....do.....	2,520.00	2	2	5		
Chief of station.....do.....	2,280.00	1	1	1		
Chief of station.....do.....	2,040.00			1		
Chemist.....do.....	3,240.00	1	1			
Chemist.....do.....	3,000.00	5	5	2		
Chemist.....do.....	2,760.00	2	3	5		
Chemist.....do.....	2,520.00	17	17	10		
Chemist.....do.....	2,400.00			1		
Chemist.....do.....	2,280.00	22	15	25		
Chemist.....do.....	2,220.00	1	1	1		
Chemist.....do.....	2,040.00	14	10	23		
Chemist.....do.....	1,800.00	24	20	26		
Chemist.....do.....	1,620.00	20	15	30		
Chemist.....do.....	1,500.00	1	1	1		
Chemist.....do.....	1,440.00	4	4	17		
Chemist (temporary).....do.....	1,200.00			3		
Bacteriologist.....do.....	2,520.00	1	2	1		
Bacteriologist.....do.....	2,280.00	1		1		
Bacteriologist.....do.....	2,040.00	1	1	1		
Bacteriologist.....do.....	1,800.00	1		1		
Bacteriologist.....do.....	1,440.00	3	1	3		
Crystallographer.....do.....	3,000.00	1	1	1		
Microanalyst.....do.....	2,760.00	1	1			
Microanalyst.....do.....	2,520.00			1		
Microanalyst.....do.....	2,280.00	1	1	1		
Microanalyst.....do.....	1,620.00	4	2	5		
Expert (temporary).....do.....	2,000.00			1		
Assistant.....do.....	4,000.00	1	1	1		
Assistant.....do.....	3,540.00	1	1			
Assistant.....do.....	3,240.00	1	1	1		
Assistant.....do.....	3,000.00	3	3	3		
Inspector.....do.....	2,500.00	2				
Inspector.....do.....	2,250.00	2				
Inspector.....do.....	2,120.00	1				
Inspector.....do.....	2,000.00	16	1	1		
Inspector.....do.....	1,800.00	15				
Inspector.....do.....	1,620.00	1				
Inspector.....do.....	1,600.00	13				
Inspector.....do.....	1,400.00	2				
Scientific assistant.....do.....	2,280.00	1	1	1		
Scientific assistant.....do.....	1,800.00	2	2	1		
Scientific assistant.....do.....	1,440.00	1	1	1		
Scientific assistant.....do.....	1,200.00			1		
Wharf examiner.....do.....	1,600.00		5			
Laboratorian.....do.....	1,440.00	7	7	5		
Laboratorian.....do.....	1,200.00	2	2	2		
Laboratorian.....do.....	1,000.00			1		
Aid.....do.....	1,080.00	2	2			
Sampler.....do.....	1,200.00			2		
Laboratory helper.....do.....	1,000.00			1		
Editor.....do.....	2,040.00	1				
Clerk (temporary), \$1,800 to \$600.....do.....			2	10		
Multigraph operator.....do.....	1,200.00			1		
Photostat operator.....do.....	1,000.00			1		
Draftsman.....do.....	2,040.00	1	1			
Draftsman.....do.....	1,800.00			1		
Chemist's aids, laboratory helpers, charwomen, messengers—						
\$960 to \$240.....do.....		3	3	10		
Collaborators, \$9 per diem to \$300.....do.....		71	71	75		
Specialists, scientific assistants, experts, and chemists, temporary—						
\$12 to \$5.....per diem.....		8	4	8		
\$150 to \$40.....per month.....						
Wages:						
Mechanic.....per annum.....	1,800.00		1			
Mechanic.....do.....	1,620.00		1	1		
Fireman.....do.....	1,080.00			2		
Painter, temporary.....per diem.....	6.00			1		
Laborers, \$900 to \$720.....per annum.....				3		
		312	243	330		
Salaries.....		\$498,000.00	\$363,300.00	\$380,855.28		
Wages.....			4,700.00	4,728.91		
OTHER OBJECTS OF EXPENDITURE.						
Stationery.....		2,700.00	1,600.00	1,562.00		
Traveling expenses.....		110,000.00	80,000.00	76,629.90		
Equipment and material.....		103,000.00	90,000.00	88,259.17		
Telephone and telegraph service.....		15,000.00	14,000.00	12,271.71		
Miscellaneous items.....		34,701.00	25,761.00	41,584.03		
Total.....		763,401.00	579,361.00	605,891.00		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Bureau of Chemistry—Continued.</i>		
<p>(68) [The Secretary of Agriculture shall, from and after the taking effect of this act, execute and perform all the powers and duties conferred on the Secretary of the Treasury by the act approved March 2, 1897 (Twenty-ninth Statutes at Large, page 604), entitled "An act to prevent the importation of impure and unwholesome tea," as amended by the act approved May 16, 1908 (Thirty-fifth Statutes at Large, page 163), entitled "An act to amend an act entitled 'An act to prevent the importation of impure and unwholesome tea,' approved March 2, 1897": <i>Provided</i>, That the bonds given to the United States as security in pursuance of section 1, as amended, shall be subject to the approval only of the collector of customs at the port of entry; that in place of the Board of United States General Appraisers provided for by section 6 of the act, there shall be designated by the Secretary of Agriculture three employees of the Department of Agriculture to serve as the United States Board of Tea Appeals with all the powers and duties conferred by the act on the Board of United States General Appraisers. There is hereby appropriated, out of any money in the Treasury not otherwise appropriated, the sum of \$40,000 for carrying into effect the provisions of the aforesaid act until the end of the fiscal year ending June 30, 1921, including payment of compensation and expenses of the members of the board appointed under section 2 of the act and all other necessary officers and employees.]</p>		
NOTE.—See note under item 69.		
<p>(69) <i>For enabling the Secretary of Agriculture to carry into effect the provisions of the act approved March 2, 1897, entitled "An act to prevent the importation of impure and unwholesome tea," as amended, including payment of compensation and expenses of the members of the board appointed under section 2 of the act and all other necessary officers and employees (submitted)</i> -----</p>	\$36, 500. 00	
<p>NOTE.—While this appears as a new item, it is merely a shortened substitute for item 68. The provisions set forth in detail in item 68 now constitute permanent legislation and need not be repeated from year to year. Under item 69 provision is made for funds for the continued enforcement of the tea importation act, which duty was conferred upon the Secretary of Agriculture by the agricultural appropriation act for the fiscal year 1921. The sum of \$40,000 was provided for enforcing the act during the fiscal year 1921, and, while the amount recommended for the fiscal year 1922 (\$36,500) is apparently \$3,500 less, there is actually no change, as 1 clerk at \$1,500, 1 clerk of class 2, and 1 messenger boy at \$600 have been transferred to the statutory roll.</p>		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
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General Expenses, Bureau of Chemistry—Continued.

Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Ex- pended, 1920. ¹
		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>
Salaries:				
Supervising examiner.....per annum..	\$3,500.00	1	1	
Examiner.....do.....	3,000.00	1	1	
Examiner.....do.....	2,500.00	1	1	
Examiner.....do.....	2,200.00	3	2	
Examiner.....do.....	1,800.00	2	2	
Examiner.....do.....	700.00	1	1	
Sampler.....do.....	1,450.00	2	1	
Sampler.....do.....	1,400.00	3	3	
Sampler.....do.....	1,200.00	1	3	
Sampler.....do.....	1,100.00	1	1	
Sampler.....do.....	1,000.00	1	1	
Clerk.....do.....	1,500.00		1	
Clerk.....do.....	1,400.00		1	
Messenger (temporary).....do.....	600.00		1	
		17	20	
Salaries.....		\$30,300.00	\$32,550.00	
OTHER OBJECTS OF EXPENDITURE.				
Traveling expenses.....		3,100.00	4,000.00	
Equipment and material.....		2,000.00	2,000.00	
Telephone and telegraph service.....		200.00	400.00	
Miscellaneous items.....		900.00	1,050.00	
Total.....		36,500.00	40,000.00	

¹ Under Treasury Department in fiscal year 1920.

- (70) For investigating the grading, weighing, handling, transportation, and uses of naval stores, the preparation of definite type samples thereof, and for the demonstration of improved methods or processes of preparing naval stores, in cooperation with individuals and companies, including the employment of necessary persons and means in the city of Washington and elsewhere (*acts June 3, 1902, vol. 32, p. 303, sec. 1; June 30, 1906, vol. 34, pp. 768-770, sec. 1; May 31, 1920, vol. 41, pp. 711-713, sec. 1*)..... \$10,000.00

Appropriation for 1918.....	\$10,000	Estimate for 1919.....	\$10,000
Appropriation for 1919.....	10,000	Estimate for 1920.....	10,000
Appropriation for 1920.....	10,000	Estimate for 1921.....	10,000
Appropriation for 1921.....	10,000	Estimate for 1922.....	10,000

Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Ex- pended, 1920.
		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>
Salaries:				
Chemist in charge.....per annum..	\$4,000.00	1	1	
Chemist in charge.....do.....	3,780.00			1
Chemist.....do.....	3,000.00	1	1	
Chemist.....do.....	2,040.00	2	2	
Chemist.....do.....	1,800.00			1
Chemist (temporary).....do.....	1,600.00			1
Chemist.....do.....	1,440.00		1	2
Chemist.....per diem..	5.00	1	1	
Laboratorian.....per annum..	1,200.00	1	1	
Laboratorian.....do.....	1,000.00			1
Aid (temporary).....do.....	720.00			1
Photostat operator (temporary).....do.....	1,000.00			1
		6	7	8
Salaries.....		\$6,500.00	\$6,500.00	\$5,020.78
OTHER OBJECTS OF EXPENDITURE.				
Traveling expenses.....		1,700.00	1,700.00	\$97.04
Equipment and material.....		1,400.00	1,400.00	2,637.02
Miscellaneous items.....		400.00	400.00	25.81
Total.....		10,000.00	10,000.00	8,580.65

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.																																																																																					
<i>General Expenses, Bureau of Chemistry—Continued.</i>																																																																																							
(71) For the investigation and development of methods of manufacturing insecticides and fungicides, and for investigating chemical problems relating to the composition, action, and application of insecticides and fungicides (<i>acts June 3, 1902, vol. 32, p. 303, sec. 1; June 30, 1906, vol. 34, pp. 768-770, sec. 1; May 31, 1920, vol. 41, pp. 711-713, sec. 1</i>) -	\$25,000. 00																																																																																						
Appropriation for 1919..... \$25,000 Appropriation for 1920..... 25,000 Appropriation for 1921..... 25,000	Estimate for 1920..... \$25,000 Estimate for 1921..... 25,000 Estimate for 1922..... 25,000																																																																																						
<table><tr><th>Employees.</th><th>Rate.</th><th>Estimated, 1922.</th><th>Appropriated, 1921.</th><th>Expended, 1920.</th></tr><tr><td>Salaries:</td><td></td><td><i>Number.</i></td><td><i>Number.</i></td><td><i>Number.</i></td></tr><tr><td>Assistant chief.....per annum..</td><td>\$4,500.00</td><td>1</td><td>1</td><td>1</td></tr><tr><td>Chemist.....do.....</td><td>2,760.00</td><td>1</td><td>1</td><td>1</td></tr><tr><td>Chemist.....do.....</td><td>2,520.00</td><td></td><td></td><td>1</td></tr><tr><td>Chemist.....do.....</td><td>2,040.00</td><td>1</td><td>1</td><td></td></tr><tr><td>Chemist.....do.....</td><td>1,800.00</td><td>1</td><td>1</td><td>3</td></tr><tr><td>Chemist.....do.....</td><td>1,620.00</td><td>5</td><td>3</td><td>1</td></tr><tr><td>Chemist.....do.....</td><td>1,440.00</td><td>1</td><td>1</td><td>3</td></tr><tr><td>Clerk (temporary).....do.....</td><td>1,800.00</td><td></td><td></td><td>1</td></tr><tr><td></td><td></td><td>9</td><td>8</td><td>9</td></tr><tr><td>Salaries.....</td><td></td><td>\$16,140.00</td><td>\$16,380.00</td><td>\$10,767.50</td></tr><tr><td>OTHER OBJECTS OF EXPENDITURE.</td><td></td><td></td><td></td><td></td></tr><tr><td>Traveling expenses.....</td><td></td><td>4,000.00</td><td>4,000.00</td><td>427.88</td></tr><tr><td>Equipment and material.....</td><td></td><td>4,540.00</td><td>4,300.00</td><td>2,151.71</td></tr><tr><td>Miscellaneous items.....</td><td></td><td>320.00</td><td>320.00</td><td>69.38</td></tr><tr><td>Total.....</td><td></td><td>25,000.00</td><td>25,000.00</td><td>13,416.47</td></tr></table>	Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.	Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>	Assistant chief.....per annum..	\$4,500.00	1	1	1	Chemist.....do.....	2,760.00	1	1	1	Chemist.....do.....	2,520.00			1	Chemist.....do.....	2,040.00	1	1		Chemist.....do.....	1,800.00	1	1	3	Chemist.....do.....	1,620.00	5	3	1	Chemist.....do.....	1,440.00	1	1	3	Clerk (temporary).....do.....	1,800.00			1			9	8	9	Salaries.....		\$16,140.00	\$16,380.00	\$10,767.50	OTHER OBJECTS OF EXPENDITURE.					Traveling expenses.....		4,000.00	4,000.00	427.88	Equipment and material.....		4,540.00	4,300.00	2,151.71	Miscellaneous items.....		320.00	320.00	69.38	Total.....		25,000.00	25,000.00	13,416.47		
Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.																																																																																			
Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>																																																																																			
Assistant chief.....per annum..	\$4,500.00	1	1	1																																																																																			
Chemist.....do.....	2,760.00	1	1	1																																																																																			
Chemist.....do.....	2,520.00			1																																																																																			
Chemist.....do.....	2,040.00	1	1																																																																																				
Chemist.....do.....	1,800.00	1	1	3																																																																																			
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Miscellaneous items.....		320.00	320.00	69.38																																																																																			
Total.....		25,000.00	25,000.00	13,416.47																																																																																			
(72) For the study and improvement of methods of dehydrating materials used for food, in cooperation with such persons, associations, or corporations as may be found necessary, and to disseminate information as to the value and suitability of such products for food ["\$23,500"] (<i>same acts</i>) - - -	100,000. 00																																																																																						
Appropriation for 1920..... \$50,000 Appropriation for 1921..... 23,500	Estimate for 1921..... \$23,500 Estimate for 1922..... 100,000																																																																																						
NOTE.—There is an increase in this item of \$76,500. The technology of drying foods has been greatly improved as a result of the department's work, and it is now possible to produce dried foods that retain the flavor and food value of the original and are vastly superior to the dried foods of the past, which were far from desirable in that they were usually unpalatable and unattractive in appearance. There is every reason to believe that a drying industry as important as the canning industry can be established in this country. It is not improbable, in fact, that, because of the high-grade dried products which it is possible to make, dried food products will under some circumstances largely replace canned goods, since in the matter of shipping and storing they are more economical than the latter and are equal to and in some respects superior in quality to the canned product.																																																																																							

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
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General Expenses, Bureau of Chemistry—Continued.

Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Ex- pended, 1920.
Salaries:		Number.	Number.	Number.
Chemist in charge.....per annum..	\$2,760.00			1
Chemist in charge.....do.....	2,500.00	1	1	
Investigator.....do.....	2,500.00			1
Investigator.....do.....	2,280.00	1	1	
Investigator.....do.....	2,040.00	1		1
Chemist.....do.....	1,620.00	8	2	1
Chemist.....do.....	1,440.00	8		3
Bacteriologist.....do.....	1,800.00			1
Assistant.....do.....	2,520.00	1	1	
Assistant.....do.....	2,370.00	1		1
Assistant.....do.....	1,800.00	2	1	1
Assistant.....do.....	2,340.00			1
Assistant.....do.....	1,440.00	2		2
Assistant.....do.....	1,200.00			1
Clerk.....do.....	1,800.00			1
Clerk.....do.....	1,500.00			1
Multigraph operator.....do.....	1,200.00			1
Photostat operator.....do.....	1,000.00		1	
Expert.....per diem..	12.50			1
		25	7	18
Salaries.....		\$42,670.00	\$11,500.00	\$21,276.78
OTHER OBJECTS OF EXPENDITURE.				
Traveling expenses.....		15,000.00	7,500.00	8,865.34
Equipment and material.....		39,600.00	3,000.00	6,990.98
Telephone and telegraph service.....		600.00	300.00	208.24
Miscellaneous items.....		2,130.00	1,200.00	4,423.16
Total.....		100,000.00	23,500.00	41,764.50

- (73) For the investigation and development of methods of utilizing wool-scouring waste (*acts June 3, 1902, vol. 32, p. 303, sec. 1; June 30, 1906, vol. 34, pp. 768-770, sec. 1; May 31, 1920, vol. 41, pp. 711-713, sec. 1*)..... \$9,000.00

Appropriation for 1920.....	\$9,000	Estimate for 1921.....	\$9,000
Appropriation for 1921.....	9,000	Estimate for 1922.....	9,000

Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Ex- pended, 1920.
Salaries:		Number.	Number.	Number.
Chemist in charge.....per annum..	\$4,000.00	1	1	
Chemist in charge.....do.....	3,780.00			1
Chemist.....do.....	3,000.00	1	1	
Chemist.....do.....	2,520.00			1
Chemist.....do.....	2,000.00			1
Chemist.....do.....	1,800.00	1	1	1
Chemist.....do.....	1,620.00	1	1	3
Laboratorian.....do.....	1,200.00	1	1	1
Aid.....do.....	720.00	2	2	1
		7	7	9
Salaries.....		\$7,000.00	\$7,000.00	\$7,293.52
OTHER OBJECTS OF EXPENDITURE.				
Traveling expenses.....		1,000.00	1,000.00	370.25
Equipment and material.....		800.00	800.00	609.04
Miscellaneous items.....		200.00	200.00	73.67
Total.....		9,000.00	9,000.00	8,346.48

- (74) For investigating the utilization of agricultural raw materials in the production of leather and tanning and leather-making materials and for developing and demonstrating improved methods or processes for producing leather (submitted)..... 15,000.00

NOTE.—This is a new item. Work on leather and tanning materials has been carried on in a small way by the Bureau of Chemistry for many years, but the desirability of making special provision for an investigation of this type is particularly important in view of the scarcity of leather and leather-making materials at the present time. The long-used vegetable tanning materials, which are direct products of the forest and farm, are totally inadequate under present conditions to supply the

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
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General Expenses, Bureau of Chemistry—Continued.

country's needs, and others should be sought and developed. No investigations of leather and leather-making materials can be properly organized and completed which do not consider the composition and effect of the various tanning materials on the wearing qualities of leather. The development and demonstration of improved methods and processes for producing leather and the dissemination of definite information on how to make and recognize better and more durable leathers would be of inestimable service now.

Large quantities of hides, skins, and tanning materials are imported annually, much of which would be unnecessary if all the leather made in this country were of better quality. About one-third of the hides and skins used in this country are now supplied by country butchers and farmers. Owing to carelessness and lack of knowledge in curing these hides and skins, it is estimated that the farmers and country butchers lose annually \$15,000,000, while the loss to the country in leather value is probably more than double that amount. The work contemplated under the proposed new item is purely agricultural in character. The interest of agriculture in tanning raw materials, in tanning, and in leather is paramount, since the agricultural industry supplies nearly all the raw material, and the farming population is the largest single class of consumers of the finished products. There is no industry more closely related to agriculture than that of tanning, and any research work in the field of tanning must be based primarily on agriculture and the work of the department.

Employees.	Rate.	Estimated, 1922.	Appropriated, 1921. ¹	Expended, 1920. ¹
Salaries:		Number.	Number.	Number.
Chemist in charge.....per annum.	\$2,500.00	1	.....	.....
Tanner.....do.....	2,280.00	1	.....	.....
Chemist.....do.....	1,620.00	3	.....	.....
Assistant.....do.....	900.00	1	.....	.....
		6	.....	.....
Salaries.....		\$7,300.00	.....	.....
OTHER OBJECTS OF EXPENDITURE.				
Traveling expenses.....		1,000.00	.....	.....
Equipment and material.....		6,060.00	.....	.....
Miscellaneous items.....		640.00	.....	.....
Total.....		15,000.00	.....	.....

¹ No appropriation for the fiscal years 1920 and 1921.

- 75) *For the investigation and development of methods for the prevention of grain-dust, smut-dust, and other plant-dust explosions and resulting fires, including fires in cotton gins and cotton oil mills (submitted).....* \$50,000.00

NOTE.—This is a new item. Plant-dust explosions and fires have resulted in large losses of life and property. The educational work, based on the department's researches, which has been carried on during the past three years in cooperation with the United States Grain Corporation, was terminated on July 1, 1920. The results of the campaign were very gratifying, and during the three years that the Grain Corporation operated it suffered no extensive explosion or fire losses. The fact that at practically no time was the value of stocks in storage less than \$100,000,000, and that at certain times it reached approximately \$500,000,000, shows the importance of the saving thus effected, to say nothing of the safeguarding of human life.

Because of a lack of funds it has not been possible for the Bureau of Chemistry to continue the necessary research work in connection with this problem and extend the activities to industries handling raw agricultural products where inflammable dusts are created. There have been developed in the investigation of recent explosions a large number of engineering and chemical problems that must be studied before these explosions and fires can be entirely prevented.

The estimate as submitted covers the lines of work projected by the Bureau of Chemistry relating to explosions and fires in grain mills, elevators, and industrial plants where explosive dusts are created, and also the work relating to fires in cotton gins and cotton oil mills. On account of the excessive fire losses to both buildings and food products, causing almost prohibitive insurance rates (recently increased more than 50 per cent), the cottonseed oil industry has requested that the cotton-gin

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
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General Expenses, Bureau of Chemistry—Continued.

fire investigations be extended to include studies of the causes of fires in cottonseed oil mills. Since these two industries are so closely related, it is considered expedient and advisable to extend the investigations along both lines.

No provision has been made in this estimate for work relating to thresher explosion and fire prevention. The department has developed effective methods for the control of these explosions and fires and this phase of the project can be considered definitely closed. The remaining phases of the work concerning grain cleaning and smut control in connection with threshing operations will be handled by the Bureau of Markets and Crop Estimates and the Bureau of Plant Industry, respectively.

Employees.	Rate.	Estimated, 1922.	Appropriated, 1921. ¹	Expended, 1920. ¹
Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>
Engineer in charge.....per annum..	\$3,240.00	1	.....	.....
Engineer.....do.....	3,000.00	1	.....	.....
Chemist.....do.....	3,000.00	1	.....	.....
Chemist.....do.....	2,740.00	1	.....	.....
Assistant.....do.....	2,520.00	1	.....	.....
Assistant.....do.....	2,400.00	1	.....	.....
Assistant.....do.....	2,160.00	1	.....	.....
Assistant.....do.....	1,800.00	5	.....	.....
Specialist.....do.....	3,000.00	1	.....	.....
		13	.....	.....
Salaries.....		\$31,060.00	.....	.....
OTHER OBJECTS OF EXPENDITURE.				
Traveling expenses.....		15,000.00	.....	.....
Equipment and material.....		2,400.00	.....	.....
Miscellaneous items.....		1,540.00	.....	.....
Total.....		50,000.00	.....	.....

¹ No appropriation for the fiscal years 1920 and 1921.

- (76) *For investigating the production and utilization of vegetable fats and oils (submitted)* \$20,000.00

NOTE.—This is a new item. The production of vegetable fats and oils, such as cottonseed, peanut, corn, soy bean, olive, and many others, is becoming of increasing value and importance to the country. At the present time there is much loss because of inefficient methods used in the production, handling, and use of these products. A large part of the vegetable oil production of the country is still under rule-of-thumb methods. It is intended to supplement laboratory studies on the composition and property of the oils by investigations and experiments in cooperation with existing commercial plants. In addition to improving present methods for producing vegetable oils of commercial importance, it is desired to study other oils from seeds and plants now little used, to the end that oils better adapted for specific purposes may be produced. It is believed that the small appropriation requested for this work will yield results of great economic value to the country by increasing the quantity and quality of vegetable oils and by making possible a more profitable utilization of farm products.

Employees.	Rate.	Estimated, 1922.	Appropriated, 1921. ¹	Expended, 1920. ¹
Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>
Chemist in charge.....per annum..	\$3,000.00	1	.....	.....
Chemist.....do.....	2,520.00	1	.....	.....
Chemist.....do.....	2,040.00	2	.....	.....
Chemist.....do.....	1,800.00	2	.....	.....
		6	.....	.....
Salaries.....		\$13,200.00	.....	.....
OTHER OBJECTS OF EXPENDITURE.				
Traveling expenses.....		2,800.00	.....	.....
Equipment and material.....		1,900.00	.....	.....
Miscellaneous items.....		2,100.00	.....	.....
Total.....		20,000.00	.....	.....

¹ No appropriation for the fiscal years 1920 and 1921.

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.																																																												
<i>General Expenses, Bureau of Chemistry—Continued.</i>																																																														
(77) <i>For the investigation and development of methods for utilizing sorghum and sorghum grains (submitted)</i>	\$15, 000. 00																																																													
<p>NOTE.—This is a new item. Sorghum is produced in semiarid territory where maize can not be grown. It is the principal agricultural crop in some of the dry sections of the United States. Very little work has ever been done to determine what products can be obtained from the utilization of sorghum grain. It is probable that an industry similar to the corn products industry can be established after sufficient study and experimentation have shown the nature of all the substances that can be extracted from sorghum grain. Since the demand for this grain is limited, any work that will extend the use to which it can be put will be of immense value to the farmers of the semiarid regions.</p>																																																														
<table><tr><th>Employees.</th><th>Rate.</th><th>Estimated, 1922.</th><th>Appropriated, 1921.¹</th><th>Expended, 1920.¹</th></tr><tr><td>Salaries:</td><td></td><td><i>Number.</i></td><td><i>Number.</i></td><td><i>Number.</i></td></tr><tr><td>Chemist in charge.....per annum..</td><td>\$3, 000. 00</td><td>1</td><td>.....</td><td>.....</td></tr><tr><td>Chemist.....do.....</td><td>2, 040. 00</td><td>2</td><td>.....</td><td>.....</td></tr><tr><td>Chemist.....do.....</td><td>1, 800. 00</td><td>2</td><td>.....</td><td>.....</td></tr><tr><td></td><td></td><td>5</td><td>.....</td><td>.....</td></tr><tr><td>Salaries.....</td><td></td><td>\$10, 680. 00</td><td>.....</td><td>.....</td></tr><tr><td colspan="5">OTHER OBJECTS OF EXPENDITURE.</td></tr><tr><td>Traveling expenses.....</td><td></td><td>2, 200. 00</td><td>.....</td><td>.....</td></tr><tr><td>Equipment and material.....</td><td></td><td>1, 420. 00</td><td>.....</td><td>.....</td></tr><tr><td>Miscellaneous items.....</td><td></td><td>700. 00</td><td>.....</td><td>.....</td></tr><tr><td>Total.....</td><td></td><td>15, 000. 00</td><td>.....</td><td>.....</td></tr></table>	Employees.	Rate.	Estimated, 1922.	Appropriated, 1921. ¹	Expended, 1920. ¹	Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>	Chemist in charge.....per annum..	\$3, 000. 00	1	Chemist.....do.....	2, 040. 00	2	Chemist.....do.....	1, 800. 00	2			5	Salaries.....		\$10, 680. 00	OTHER OBJECTS OF EXPENDITURE.					Traveling expenses.....		2, 200. 00	Equipment and material.....		1, 420. 00	Miscellaneous items.....		700. 00	Total.....		15, 000. 00		
Employees.	Rate.	Estimated, 1922.	Appropriated, 1921. ¹	Expended, 1920. ¹																																																										
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¹ No appropriation for the fiscal years 1920 and 1921.																																																														
In all, for general expenses	\$1, 336, 141. 00	\$907, 401. 00																																																												
<table><tr><td>Appropriations for 1912.....</td><td>\$111, 480</td><td>Estimates for 1913.....</td><td>\$101, 280</td></tr><tr><td>Appropriations for 1913.....</td><td>89, 280</td><td>Estimates for 1914.....</td><td>114, 280</td></tr><tr><td>Appropriations for 1914.....</td><td>109, 280</td><td>Estimates for 1915.....</td><td>180, 680</td></tr><tr><td>Appropriations for 1915.....</td><td>150, 680</td><td>Estimates for 1916.....</td><td>164, 080</td></tr><tr><td>Appropriations for 1916.....</td><td>139, 680</td><td>Estimates for 1917.....</td><td>832, 211</td></tr><tr><td>Appropriations for 1917.....</td><td>838, 211</td><td>Estimates for 1918.....</td><td>927, 201</td></tr><tr><td>Appropriations for 1918.....</td><td>837, 601</td><td>Estimates for 1919.....</td><td>849, 481</td></tr><tr><td>Appropriations for 1919.....</td><td>849, 481</td><td>Estimates for 1920.....</td><td>1, 199, 901</td></tr><tr><td>Appropriations for 1920.....</td><td>979, 901</td><td>Estimates for 1921.....</td><td>996, 421</td></tr><tr><td>Appropriations for 1921.....</td><td>907, 401</td><td>Estimates for 1922.....</td><td>1, 336, 141</td></tr></table>	Appropriations for 1912.....	\$111, 480	Estimates for 1913.....	\$101, 280	Appropriations for 1913.....	89, 280	Estimates for 1914.....	114, 280	Appropriations for 1914.....	109, 280	Estimates for 1915.....	180, 680	Appropriations for 1915.....	150, 680	Estimates for 1916.....	164, 080	Appropriations for 1916.....	139, 680	Estimates for 1917.....	832, 211	Appropriations for 1917.....	838, 211	Estimates for 1918.....	927, 201	Appropriations for 1918.....	837, 601	Estimates for 1919.....	849, 481	Appropriations for 1919.....	849, 481	Estimates for 1920.....	1, 199, 901	Appropriations for 1920.....	979, 901	Estimates for 1921.....	996, 421	Appropriations for 1921.....	907, 401	Estimates for 1922.....	1, 336, 141																						
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<i>Statement of clerks employed in District of Columbia under lump-fund appropriations for 30 days or more during the fiscal year ended June 30, 1920 (32 Stat., p. 303).</i>																																																														
GENERAL EXPENSES, BUREAU OF CHEMISTRY.																																																														
2 clerks, at \$1,800 each per annum.																																																														
1 clerk, \$1,500 per annum.																																																														
1 clerk, \$1,440 per annum.																																																														
3 clerks, at \$1,400 each per annum.																																																														
1 clerk, \$1,000 per annum.																																																														
Total for Bureau of Chemistry	1, 687, 231. 00	1, 333, 591. 00																																																												

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
BUREAU OF SOILS.		
<i>Salaries, Bureau of Soils—</i>		
(1) One soil physicist, who shall be chief of bureau (increase of \$2,000) (<i>R. S. p. 87, secs. 520-523; acts June 3, 1902, vol. 32, p. 297, sec. 1; May 31, 1920, vol. 41, p. 713, sec. 1</i>) ----	\$6, 000. 00	
NOTE.—An increase of \$2,000 in the salary of the chief of bureau is recommended. See note under item 1, page 19.		
(2) One chief clerk (<i>same acts</i>) -----	2, 000. 00	
(3) One editor (<i>submitted</i>) -----	2, 400. 00	
NOTE.—This new place is in lieu of 1 administrative assistant, \$2,100 (item 4). It involves a promotion of \$300 for the officer who supervises the editorial work of the bureau. His duties are very exacting, and require a technical knowledge of soils and familiarity with the activities and policies of the bureau. This employee has been in the department 19 years. He is a very valuable member of the force, and it would be exceedingly difficult to replace him. He has received only one promotion in 16 years.		
(4) One administrative assistant, \$2, 100.		
NOTE.—See note under item 3. The title of this position has been changed to editor, in order to have it descriptive of the duties performed.		
(5) One executive assistant (increase of \$400) (<i>R. S., p. 87, secs. 520-523; acts June 3, 1902, vol. 32, p. 297, sec. 1; May 31, 1920, vol. 41, p. 713, sec. 1</i>) -----	2, 400. 00	
NOTE.—This promotion is recommended for an employee who has served the department 27 years and has not received an increase in salary since 1910. He occupies the responsible position of executive assistant in the soil survey division, involving supervision of the details pertaining to the field work and other administrative functions in that division. He is an exceedingly efficient employee.		
(6) Four clerks, class 4 (<i>same acts</i>) -----	7, 200. 00	
(7) Four clerks, class 3 (increase of 2) (<i>same acts</i>) -----	6, 400. 00	
NOTE.—The above new places and those in item 8 are submitted in lieu of 4 clerks, at \$1,000 each. These new places will be an added incentive to the efficiency of the force and will enable the bureau to promote a few of the more deserving clerks or to secure competent help through direct appointment. The \$1,000 clerical positions of the bureau have remained vacant during the greater portion of the past three years, it being impossible to obtain competent help at that salary. A number of efficient clerks have resigned because of the small prospects of promotion.		
(8) Seven clerks, class 2 (increase of 2) (<i>same acts</i>) -----	9, 800. 00	
NOTE.—See note under item 7.		
(9) One clerk (<i>same acts</i>) -----	1, 260. 00	
(10) Thirteen clerks, class 1 (<i>same acts</i>) -----	15, 600. 00	
(11) Four clerks, at \$1, 000 each.		
NOTE.—See note under item 7.		
(12) Two soil cartographers, at \$1,800 each (<i>same acts</i>) -----	3, 600. 00	
(13) One draftsman (<i>same acts</i>) -----	1, 600. 00	

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.																																								
<i>Salaries, Bureau of Soils—Continued.</i>																																										
(14) One soil bibliographer or draftsman (<i>R. S.</i> , p. 87, <i>secs.</i> 520–523; <i>acts June 3, 1902</i> , vol. 32, p. 297, <i>sec.</i> 1; <i>May 31, 1920</i> , vol. 41, p. 713, <i>sec.</i> 1) -----	\$1, 400. 00																																									
(15) One photographer (increase of \$400) (<i>same acts</i>) -----	1, 600. 00																																									
NOTE.—The present \$1,200 position for photographer has remained vacant for some time because of the department's inability to obtain a satisfactory operator at that salary. The position demands very expert knowledge of wet-plate photography and a man qualified to do very accurate measurement work. Wet-plate photography is used to a large extent in reproducing the soil-survey base maps. It requires a high degree of technical skill, which is acquired only by long experience. Competent operators of this character are scarce, and much difficulty has been experienced in obtaining such assistance in view of the fact that the wet-plate process is now practically obsolete except in lithographic and map-production work.																																										
(16) Eight draftsmen, at \$1,200 each (<i>same acts</i>) -----	9, 600. 00																																									
(17) One laboratory helper (<i>same acts</i>) -----	1, 000. 00																																									
(18) Three laboratory helpers, at \$840 each (<i>same acts</i>) -----	2, 520. 00																																									
(19) One machinist (<i>same acts</i>) -----	1, 440. 00																																									
(20) One machinist (<i>same acts</i>) -----	1, 380. 00																																									
(21) One instrument maker (<i>same acts</i>) -----	1, 200. 00																																									
(22) One machinist's helper (<i>same acts</i>) -----	900. 00																																									
(23) One messenger (<i>same acts</i>) -----	840. 00																																									
(24) Two messenger boys, at \$480 each (<i>same acts</i>) -----	960. 00																																									
(25) One messenger or laborer (<i>same acts</i>) -----	660. 00																																									
(26) Three laborers, at \$600 each (<i>same acts</i>) -----	1, 800. 00																																									
(27) One laborer (<i>same acts</i>) -----	300. 00																																									
(28) One charwoman or laborer (<i>same acts</i>) -----	480. 00																																									
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	\$84, 340. 00	\$79, 240. 00																																								
<table><tr><td>Appropriations for 1912.....</td><td>\$48,320</td><td>Estimates for 1913.....</td><td>\$57,330</td></tr><tr><td>Appropriations for 1913.....</td><td>59,540</td><td>Estimates for 1914.....</td><td>57,420</td></tr><tr><td>Appropriations for 1914.....</td><td>53,620</td><td>Estimates for 1915.....</td><td>59,420</td></tr><tr><td>Appropriations for 1915.....</td><td>60,820</td><td>Estimates for 1916.....</td><td>62,420</td></tr><tr><td>Appropriations for 1916.....</td><td>62,420</td><td>Estimates for 1917.....</td><td>70,000</td></tr><tr><td>Appropriations for 1917.....</td><td>70,000</td><td>Estimates for 1918.....</td><td>72,620</td></tr><tr><td>Appropriations for 1918.....</td><td>72,220</td><td>Estimates for 1919.....</td><td>74,160</td></tr><tr><td>Appropriations for 1919.....</td><td>74,160</td><td>Estimates for 1920.....</td><td>74,160</td></tr><tr><td>Appropriations for 1920.....</td><td>74,160</td><td>Estimates for 1921.....</td><td>80,860</td></tr><tr><td>Appropriations for 1921.....</td><td>79,240</td><td>Estimates for 1922.....</td><td>84,340</td></tr></table>			Appropriations for 1912.....	\$48,320	Estimates for 1913.....	\$57,330	Appropriations for 1913.....	59,540	Estimates for 1914.....	57,420	Appropriations for 1914.....	53,620	Estimates for 1915.....	59,420	Appropriations for 1915.....	60,820	Estimates for 1916.....	62,420	Appropriations for 1916.....	62,420	Estimates for 1917.....	70,000	Appropriations for 1917.....	70,000	Estimates for 1918.....	72,620	Appropriations for 1918.....	72,220	Estimates for 1919.....	74,160	Appropriations for 1919.....	74,160	Estimates for 1920.....	74,160	Appropriations for 1920.....	74,160	Estimates for 1921.....	80,860	Appropriations for 1921.....	79,240	Estimates for 1922.....	84,340
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NOTE.—Apparent increase, \$5,100; actual increase, \$5,100, as follows:																																										
<i>Promotions.</i>																																										
1 chief of bureau, from \$4,000 to \$6,000.....	\$2, 000																																									
1 executive assistant, from \$2,000 to \$2,400.....	400																																									
1 photographer, from \$1,200 to \$1,600.....	400																																									
	<hr/>																																									
	2, 800																																									
<i>New places.</i>																																										
1 editor.....	\$2, 400																																									
2 clerks, class 3.....	3, 200																																									
2 clerks, class 2.....	2, 800																																									
	<hr/>																																									
	8, 400																																									
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	\$11, 200																																									
<i>Places dropped.</i>																																										
1 administrative assistant.....	2, 100																																									
4 clerks, at \$1,000 each.....	4, 000																																									
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	6, 100																																									
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Increase	5, 100																																									

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.	
<i>General Expenses, Bureau of Soils—</i>			
(29) For all necessary expenses connected with the investigations and experiments hereinafter authorized, including the employment of investigators, local and special agents, assistants, experts, clerks, draftsmen, and labor in the city of Washington and elsewhere; official traveling expenses, materials, tools, instruments, apparatus, repairs to apparatus, chemicals, furniture, office fixtures, stationery, gas, electric current, telegraph and telephone service, express and freight charges, rent outside of the District of Columbia, and for all other necessary supplies and expenses, as follows (<i>acts June 3, 1902, vol. 32, p. 297, sec. 1; May 31, 1920, vol. 41, pp. 713, 714, sec. 1</i>):			
(30) For chemical investigations of soil types, soil composition, and soil minerals, the soil solution, solubility of soil and all chemical properties of soils in their relation to soil formation, soil texture, and soil productivity, including all routine chemical work in connection with the soil survey 【\$23,110】 (<i>same acts</i>)	\$42, 540. 00		
Appropriation for 1913.....	\$18, 135	Estimate for 1914.....	\$18, 135
Appropriation for 1914.....	18, 135	Estimate for 1915.....	22, 350
Appropriation for 1915.....	22, 350	Estimate for 1916.....	22, 350
Appropriation for 1916.....	22, 350	Estimate for 1917.....	20, 610
Appropriation for 1917.....	20, 610	Estimate for 1918.....	25, 610
Appropriation for 1918.....	25, 610	Estimate for 1919.....	25, 610
Appropriation for 1919.....	25, 610	Estimate for 1920.....	25, 610
Appropriation for 1920.....	25, 610	Estimate for 1921.....	25, 610
Appropriation for 1921.....	23, 110	Estimate for 1922.....	42, 540
NOTE.—There is an increase in this item of \$19,430, which is requested for the following purposes:			
(a) \$11,280 for the investigation of soil colloids. It has been demonstrated that colloids are the natural binding materials of the soil which in a dry state form a more powerful binder than Portland cement. They absorb soil gases, such as ammonia, and water soluble salts, acting as a kind of reservoir in the soil for these soluble materials. If there is much colloid material present in the soil, it is practically impossible with our present knowledge of the subject to properly drain the soil. This has a very important bearing on the subgrades of our extensive roads, some of which are failing every year. Engineers heretofore have concentrated their principal attention upon road surface but have neglected to consider adequately the soil upon which the road is constructed. To control the amount of soil colloids in order to properly drain road subgrades and farm lands so as to improve the physical condition of cultivated soils and to eliminate the possibility of injuring land by plowing it when in too wet a condition will be the object of this investigation.			
(b) \$8,150 for the study of soil solutions. In soil extracts many of the single, double, and triple salts that occur in the Stassfurt deposits in Germany have been found. Chemists have long been dissatisfied with the conventional way of pairing off elements to form simple compounds in interpreting the results of analysis. It has been found that the salts are much more complex than they were supposed to be and that they possess very different properties from the simpler salts. It is necessary to work over soils of the principal types in order to determine which of these complex salts occur in the various types, the influence they exert upon plant nutrition, and the effect they have upon fertilizer materials.			

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.					Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Bureau of Soils—Continued.</i>						
Employees.	Rate.	Esti- mated, 1922.	Appro- priated, 1921.	Ex- pended, 1920.		
Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>		
Assistant in charge.....per annum..	\$3,750.00	1	1	1		
Chemist.....do.....	3,000.00	2				
Chemist.....do.....	1,980.00	1				
Chemist.....do.....	1,800.00	2	1	1		
Scientist.....do.....	3,000.00	1	1	1		
Scientist.....do.....	2,400.00	1	1	1		
Scientist.....do.....	2,250.00	3				
Scientist.....do.....	2,160.00	1	1			
Scientist.....do.....	2,000.00			1		
Scientist.....do.....	1,980.00	1	1	2		
Scientist.....do.....	1,800.00	3	3			
Scientist.....do.....	1,680.00			2		
Scientist.....do.....	1,620.00			3		
Laboratory helper.....do.....	1,200.00		1	1		
Field assistant, (temporary).....do.....	1,200.00			1		
		16	10	14		
Salaries.....		\$37,020.00	\$21,690.00	\$22,446.48		
OTHER OBJECTS OF EXPENDITURE.						
Traveling expenses.....		1,500.00	75.00	51.48		
Equipment and material.....		3,020.00	1,000.00	2,644.37		
Miscellaneous items.....		1,000.00	345.00	112.93		
Total.....		42,540.00	23,110.00	25,255.26		

- (31) For physical investigations of the important properties of soil which determine productivity, such as moisture relations, aerations, heat conductivity, texture, and other physical investigations of the various soil classes and soil types **[\$12,225]** (*acts June 3, 1902, vol. 32, p. 297, sec. 1; May 31, 1920, vol. 41, pp. 713, 714, sec. 1*)..... \$17,225.00

Appropriation for 1913.....	\$11,265	Estimate for 1914.....	\$11,265
Appropriation for 1914.....	11,265	Estimate for 1915.....	19,470
Appropriation for 1915.....	19,470	Estimate for 1916.....	11,265
Appropriation for 1916.....	15,265	Estimate for 1917.....	12,225
Appropriation for 1917.....	12,225	Estimate for 1918.....	12,225
Appropriation for 1918.....	12,225	Estimate for 1919.....	12,225
Appropriation for 1919.....	12,225	Estimate for 1920.....	12,225
Appropriation for 1920.....	12,225	Estimate for 1921.....	17,225
Appropriation for 1921.....	12,225	Estimate for 1922.....	17,225

NOTE.—There is an increase in this item of \$5,000. Important developments in the separation of ultraclay from clay materials indicate the high importance of ultraclay in its bearings upon the physical properties of the soil. The services of an assistant are needed to carry out this investigation and additional funds will be required to meet the increased cost of designing instruments.

Employees.	Rate.	Esti- mated, 1922.	Appro- priated, 1921.	Ex- pended, 1920.
Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>
Scientist in charge.....per annum..	\$3,750.00	1	1	
Scientist.....do.....	3,500.00			1
Scientist.....do.....	3,000.00	1	1	
Scientist.....do.....	2,500.00	1		1
Scientist.....do.....	1,800.00	1	1	1
Scientist (temporary).....do.....	1,500.00			1
Instrument maker.....do.....	2,000.00	1	1	1
Laboratory helper.....do.....	1,400.00	1	1	1
		6	5	6
Salaries.....		\$14,480.00	\$11,980.00	\$11,416.67
OTHER OBJECTS OF EXPENDITURE.				
Traveling expenses.....		175.00	100.00	95.29
Equipment and material.....		2,500.00	100.00	121.00
Miscellaneous items.....		70.00	45.00	327.84
Total.....		17,225.00	12,225.00	11,960.80

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
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General Expenses, Bureau of Soils—Continued.

- (32) For exploration and investigation within the United States to determine possible sources of supply of potash, nitrates, and other natural fertilizers (*acts June 3, 1902, vol. 32, p. 297, sec. 1; May 31, 1920, vol. 41, pp. 713, 714, sec. 1*) --- \$36,840.00

Appropriation for 1913.....	\$22,200	Estimate for 1914.....	\$27,200
Appropriation for 1914.....	25,000	Estimate for 1915.....	31,500
Appropriation for 1915.....	31,500	Estimate for 1916.....	36,500
Appropriation for 1916.....	36,500	Estimate for 1917.....	35,600
Appropriation for 1917.....	35,600	Estimate for 1918.....	33,380
Appropriation for 1918.....	33,380	Estimate for 1919.....	31,340
Appropriation for 1919.....	31,340	Estimate for 1920.....	50,000
Appropriation for 1920.....	31,340	Estimate for 1921.....	50,000
Appropriation for 1921.....	36,840	Estimate for 1922.....	36,840

Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.
Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>
Scientist.....per annum..	\$3,000.00	2	2	2
Scientist.....do.....	2,760.00	1	1	1
Scientist.....do.....	2,640.00	2	2	1
Scientist.....do.....	2,220.00	1	1	1
Scientist.....do.....	2,160.00	2	2	.....
Scientist.....do.....	2,000.00	.....	.....	1
Scientist.....do.....	1,980.00	.....	.....	1
Scientist.....do.....	1,800.00	2	2	.....
Scientist.....do.....	1,740.00	.....	.....	1
Scientist.....do.....	1,620.00	2	2	1
Chemist.....do.....	2,750.00	.....	.....	1
Instrument maker.....do.....	2,000.00	.....	.....	1
Laboratory helper.....do.....	1,100.00	.....	.....	1
Collaborator.....do.....	300.00	1	1	1
Wages:				
Machinist.....do.....	1,800.00	2	2	2
Mechanic.....per diem..	7.00	.....	.....	1
		15	15	16
Salaries.....		\$27,720.00	\$27,720.00	\$16,594.01
Wages.....		3,600.00	3,600.00	3,827.00
OTHER OBJECTS OF EXPENDITURE:				
Traveling expenses.....		1,000.00	1,000.00	1,015.41
Equipment and material.....		1,200.00	1,200.00	439.65
Miscellaneous items.....		3,320.00	3,320.00	8,267.88
Total.....		36,840.00	36,840.00	30,143.95

- (33) For the investigation and development of methods for fixing atmospheric nitrogen in forms suitable for fertilizer use (*submitted*) - 35,000.00

NOTE.—This is a new item. The problem of the fixation of nitrogen in forms available for fertilizer use is now more pressing than ever before. Work along this line was initiated by the Bureau of Soils several years before the war, and the Haber process for nitrogen fixation was so far advanced when the war began that the War Department requested the use of the bureau's Arlington farm laboratory apparatus in connection with its nitrogen-fixation work. After the signing of the armistice the work was transferred to the American University Fixed Nitrogen Research Laboratory, Washington, D. C., where cooperative investigations have been continued. The results accomplished have been highly satisfactory. These investigations have been dependent on funds set aside by the War Department, but, in view of the fact that the nitrogen supply is of fundamental importance to agriculture and that the future policy of the War Department depends largely upon congressional action, it is believed that the Bureau of Soils should have an appropriation of its own for furthering the work.

An extended study of the processes involved will be necessary in order to utilize the nitrogen-fixation plants at Sheffield and Muscle Shoals in connection with the production of fertilizer ingredients. Vaporization processes, for the recovery of phosphate, originally undertaken to stop the great waste now existing in mining the Florida rock, have shown that phosphoric acid can be prepared in a form suitable for the absorption of ammonia. Through the use of these nitrogen-fixation plants to produce ammonia or nitric acid, it is believed that concentrated fertilizers containing only the three important ingredients—nitrogen, phosphoric acid, and potash—can be manufactured. The substitution of such products for the bulky products now handled by the fertilizer trade would result in a great saving in transportation charges and the greatest economy in car space. It would seem, therefore, that the normal trend of the fertilizer industry should be toward the manufacture of concentrated fertilizers.

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
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General Expenses, Bureau of Soils—Continued.

Employees.	Rate.	Esti- mated, 1922.	Appro- priated, 1921. ¹	Ex- pended, 1920. ¹
Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>
Scientist in charge.....per annum	\$3,780.00	1		
Scientist.....do	3,000.00	1		
Scientist.....do	2,750.00	1		
Scientist.....do	2,500.00	4		
Scientist.....do	2,000.00	2		
Wages:				
Machinist.....do	2,000.00	1		
		10		
Salaries.....		\$23,530.00		
Wages.....		2,000.00		
OTHER OBJECTS OF EXPENDITURE.				
Traveling expenses.....		2,000.00		
Equipment and material.....		6,000.00		
Miscellaneous items.....		1,470.00		
Total.....		35,000.00		

¹ No appropriations for fiscal years 1920 and 1921.

- (34) *For the investigation and development of processes for the recovery of phosphoric acid and the preparation of soluble phosphates, with a view to the conservation of the deposits within the United States and the preparation of new compounds for fertilizer purposes (submitted)* \$35,000.00

NOTE.—This is a new item. Processes have been worked out for volatilizing and collecting phosphoric acid in concentrated form, which give promise of eliminating great losses from present mining methods and of utilizing relatively low-grade phosphate now regarded as of little commercial value. These will also tend to offset the greatly increased cost of handling and transporting fertilizer materials. The feasibility of the electric furnace for volatilization of phosphoric acid has been fully demonstrated, as has the use of the Cottrell precipitator for the collection of phosphoric acid thus evolved, and a number of installations are in successful operation. Efforts are now being made to lower materially the cost of production, and thus greatly widen the use of furnace processes, by showing the feasibility of employing fuel instead of electric current. Experiments on a large scale have been undertaken, and a furnace of semicommercial size, with auxiliary equipment for collecting the dust, burning the combustible gases evolved, and recovering and collecting the phosphoric acid produced, has been erected. It is important to demonstrate the commercial possibilities of these new processes, and to this end the installation of larger equipment will be necessary. As a direct result of these investigations numerous other economic problems have arisen which require careful study. In order to enlarge the scope of the investigations to the point where the commercial possibilities can be ascertained, the additional funds recommended will be necessary.

Employees.	Rate.	Esti- mated, 1922.	Appro- priated, 1921. ¹	Ex- pended, 1920. ¹
Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>
Expert in charge.....per annum	\$3,750.00	1		
Chemist.....do	2,500.00	1		
Analyst.....do	2,000.00	1		
Wages:				
Master mechanic.....do	2,750.00	1		
Machinist.....do	1,800.00	1		
Machinist.....do	1,400.00	1		
Skilled laborer.....do	1,200.00	3		
		9		
Salaries.....		\$8,250.00		
Wages.....		9,550.00		
OTHER OBJECTS OF EXPENDITURE.				
Traveling expenses.....		2,500.00		
Equipment and material.....		12,000.00		
Miscellaneous items.....		2,700.00		
Total.....		35,000.00		

¹ No appropriations for fiscal years 1920 and 1921.

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
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General Expenses, Bureau of Soils—Continued.

- (35) For the investigation and development of practical methods for the recovery of the potash lost from cement plants and blast furnaces (submitted) ----- \$25,000.00

NOTE.—This is a new item. It is estimated that at least 87,000 tons of potash escape annually from the various cement plants throughout the country. The total potash collected in 1917 was 1,621 tons, while in 1919 it was only 1,250, or less than 1.5 per cent. The percentage of potash in the dust collected at some plants is too low to justify leaching the material or shipping it for direct use as a fertilizer. Methods must therefore be devised for increasing the potash volatilized, or decreasing the dust that escapes with it, or the method of recovery must be so modified as to bring about a mechanical separation of the potash and the dust during the process of collection. There is every reason to believe that the cement industry will ultimately become an important source of American potash, but until the difficulties encountered in the recovery of this material from cement dust are overcome little satisfactory progress may be expected.

The recovery of potash from blast furnaces involves problems very similar to those encountered with cement. Investigations heretofore conducted show that the percentage of potash that escapes in the dust from some of the blast furnaces is higher than that contained in the richest cement dust. It is also possible to recover potash more economically from blast furnaces than from cement kilns, as the by-products from the former source may more than cover the cost of collecting the dust.

Employees.	Rate.	Estimated, 1922.	Appropriated, 1921. ¹	Expended, 1920. ¹
Salaries:		Number.	Number.	Number.
Expert in charge.....per annum..	\$3,500.00	1	.....	.....
Chemist.....do.....	2,500.00	3	.....	.....
Analyst.....do.....	2,000.00	2	.....	.....
		6	.....	.....
Salaries.....		\$15,000.00	.....	.....
OTHER OBJECTS OF EXPENDITURE.				
Traveling expenses.....		2,000.00	.....	.....
Equipment and material.....		8,000.00	.....	.....
Total.....		25,000.00	.....	.....

¹ No appropriations for fiscal years 1920 and 1921.

- (36) For the investigation of soils, in cooperation with other branches of the Department of Agriculture, other departments of the Government, State agricultural experiment stations, and other State institutions, and for indicating upon maps and plats, by coloring or otherwise, the results of such investigations **[\$178,900]** (acts June 3, 1902, vol. 32, p. 297, sec. 1; May 31, 1920, vol. 41, pp. 713, 714, sec. 1) ----- 228,900.00

Appropriation for 1912.....	\$166,960	Estimate for 1913.....	\$160,000
Appropriation for 1913.....	165,000	Estimate for 1914.....	195,000
Appropriation for 1914.....	169,800	Estimate for 1915.....	169,800
Appropriation for 1915.....	169,800	Estimate for 1916.....	200,100
Appropriation for 1916.....	168,200	Estimate for 1917.....	198,200
Appropriation for 1917.....	168,200	Estimate for 1918.....	198,200
Appropriation for 1918.....	216,300	Estimate for 1919.....	216,300
Appropriation for 1919.....	216,300	Estimate for 1920.....	216,300
Appropriation for 1920.....	198,200	Estimate for 1921.....	231,400
Appropriation for 1921.....	178,900	Estimate for 1922.....	228,900

NOTE.—There is an increase in this item of \$50,000, but, inasmuch as Congress at the last session reduced the appropriation by \$17,500, the actual increase recommended over the fiscal year 1920 is only \$32,500. This work is carried on in a number of States in cooperation with State institutions, the cooperating agencies contributing in salaries and field expenses an amount approximately equal to that expended by the department. It is therefore possible to accomplish practically double the results in these States for each dollar of Federal money expended. Experiment station officials, recognizing the fundamental value of soil-survey work, are making increasing use of the results in their study of local problems. The soil survey has already covered extensive areas in prac-

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
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General Expenses, Bureau of Soils—Continued.

tically all the agricultural States, and it is very important that the work be continued under Federal supervision in order that a uniform classification of the soils of the whole country may be made and a soil map of the entire United States, based on uniform methods of work, ultimately constructed. Officials of Minnesota, Montana, and Oklahoma have indicated their desire to enter into cooperation and several other States with which the department is already cooperating have requested that the work be extended. In Texas and Iowa, for example, increased funds are being devoted to soil surveys, and the department's further cooperation is desired. It is deemed inadvisable to discontinue any work in noncooperating States with the view of diverting the funds to cooperating States, as the results obtained in the former are just as essential from a national standpoint as those in the latter. In fact, it is very desirable that more work be accomplished in the noncooperating States than has been possible with the present appropriation.

Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.
Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>
Scientist in charge.....per annum..	\$3,750.00	1	1	1
Scientist.....do.....	3,250.00			1
Scientist.....do.....	3,120.00	4	4	
Scientist.....do.....	2,750.00			5
Scientist.....do.....	2,500.00	1	1	1
Scientist.....do.....	2,160.00	3	3	
Scientist.....do.....	2,040.00	2	2	3
Scientist.....do.....	1,980.00	2	2	
Scientist.....do.....	1,920.00	2	2	3
Scientist.....do.....	1,860.00			2
Scientist.....do.....	1,800.00	4	4	3
Scientist.....do.....	1,740.00	3	3	1
Scientist.....do.....	1,680.00	6	4	5
Scientist.....do.....	1,620.00	2	2	5
Scientist.....do.....	1,560.00	5	5	1
Scientist.....do.....	1,500.00	3		5
Scientist.....do.....	1,440.00	8	4	5
Scientist.....do.....	1,380.00	2	2	4
Scientist.....do.....	1,320.00	15	5	8
Scientist.....do.....	1,200.00	18	10	23
Cartographer.....do.....	1,800.00		1	1
Photographer.....do.....	1,400.00		1	1
Assistant.....do.....	1,200.00		1	1
Draftsman.....do.....	1,200.00		1	1
Special investigator(temporary), \$10 to \$8.....per diem.....			1	1
Collaborator.....per annum.....	1.00	20	20	22
Wages:				
Laborer.....do.....	840.00		1	1
		101	80	104
Salaries.....		\$130,830.00	\$100,610.00	\$90,306.55
Wages.....			840.00	840.00
OTHER OBJECTS OF EXPENDITURE.				
Traveling expenses.....		94,820.00	74,800.00	69,624.55
Equipment and material.....		1,250.00	1,200.00	1,471.73
Miscellaneous items.....		2,000.00	1,450.00	1,630.86
Total.....		228,900.00	178,900.00	163,873.69

- (37) For examination of soils to aid in the classification of agricultural lands in cooperation with other bureaus of the department and other departments of the Government (acts June 3, 1902, vol. 32, p. 297, sec. 1; May 31, 1920, vol. 41, pp. 713, 714, sec. 1).....\$15,000.00

Appropriation for 1914.....	\$20,000	Estimate for 1915.....	\$20,000
Appropriation for 1915.....	20,000	Estimate for 1916.....	20,000
Appropriation for 1916.....	20,000	Estimate for 1917.....	18,100
Appropriation for 1917.....	18,100	Estimate for 1918.....	18,100
Appropriation for 1918.....	18,100	Estimate for 1919.....	18,100
Appropriation for 1919.....	18,100	Estimate for 1920.....	18,100
Appropriation for 1920.....	18,100	Estimate for 1921.....	18,100
Appropriation for 1921.....	15,000	Estimate for 1922.....	15,000

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
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General Expenses, Bureau of Soils—Continued.

Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.
		Number.	Number.	Number.
Salaries:				
Scientist.....per annum	\$2,160.00	1	1	
Scientist.....do.....	2,040.00			1
Scientist.....do.....	1,920.00	1	1	1
Scientist.....do.....	1,860.00	1	1	
Scientist.....do.....	1,620.00			1
Administrative assistant.....do.....	2,100.00	1	1	1
Draftsman.....do.....	1,200.00		1	1
		4	5	5
Salaries.....		\$8,040.00	\$8,280.00	\$3,915.00
OTHER OBJECTS OF EXPENDITURE.				
Traveling expenses.....		6,960.00	6,720.00	2,458.46
Miscellaneous items.....				10.68
Total.....		15,000.00	15,000.00	6,384.14

- (38) For the completion, operation, and maintenance of the Government kelp plant at Summerland, Calif., **[\$192,900]** \$208,500: *Provided*, That the product obtained from such experimentation may be sold at a price to be determined by the Secretary of Agriculture, and the amount obtained from the sale thereof shall be covered into the Treasury as miscellaneous receipts (*acts June 3, 1902, vol. 32, p. 297, sec. 1; May 31, 1920, vol. 41, pp. 713, 714, sec. 1*).....\$208,500.00

Appropriation for 1919.....	\$127,600	Estimate for 1920.....	\$127,600
Appropriation for 1920.....	127,600	Estimate for 1921.....	192,900
Appropriation for 1921.....	192,900	Estimate for 1922.....	208,500

NOTE.—An increase of \$15,600 is recommended in this item in order to meet the increased cost of supplies and higher wages that must be paid in connection with the operation of the department's experimental kelp potash plant at Summerland, Calif.

The results accomplished at this plant have been very encouraging. The quantity of potash extracted from kelp has steadily increased, while the unit cost of production has been reduced. The plant is now producing approximately two tons of 80 per cent muriate of potash per day. A ready market has been found for all the products, the sales last year approximating \$50,000, the grand total to August 21, 1920, being \$114,423.04.

Experiments are being conducted and new apparatus devised and constructed for developing the by-products of kelp on a larger scale than heretofore, and, notwithstanding serious handicaps encountered during the past year, material progress has been made toward solving the problem of the profitable manufacture of potash from kelp. It only remains to increase the factory efficiency with processes already worked out to make the plant yield a revenue in excess of the gross expenditures and put it on a profit-making basis.

Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.
		Number.	Number.	Number.
Salaries:				
Scientist in charge.....per annum	\$3,750.00	1	1	1
Manager of operations.....do.....	3,250.00	1	1	
Manager of operations.....do.....	2,750.00			1
Chemist.....do.....	2,750.00	1	1	
Chemist.....do.....	2,500.00			1
Chemist.....do.....	2,400.00	1	1	1
Chemist.....do.....	2,220.00	1	1	1
Foreman.....do.....	2,520.00	1	1	
Foreman.....do.....	2,400.00			1
Foreman.....do.....	2,100.00	1	1	1
Foreman.....do.....	1,920.00	1	1	
Foreman.....do.....	1,800.00			1
Assistant to the chief.....do.....	2,500.00	1	1	1
Administrative assistant.....do.....	2,100.00			1
Assistant.....do.....	2,040.00	1	1	1
Machine operator.....do.....	1,920.00	1	1	
Machine operator.....do.....	1,800.00	3	3	
Machine operator.....do.....	1,680.00	3	3	
Machine operator.....do.....	1,620.00	1	1	1
Machine operator.....do.....	1,500.00	1	1	5
Clerk.....do.....	1,750.00	1	1	
Clerk.....do.....	1,500.00			1

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.					Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Bureau of Soils—Continued.</i>						
Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.		
Salaries—Continued.		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>		
Clerk.....per annum.	\$1,440.00	1	1	1		
Clerk.....do.	1,320.00	1	1	1		
Clerk.....do.	1,260.00			1		
Watchmen.....do.	1,680.00	2	2			
Watchman.....do.	1,140.00			1		
Laboratory assistant.....do.	1,440.00	1	1			
Wages:						
Mechanic.....do.	2,100.00	1	1			
Mechanic.....do.	1,980.00			2		
Mechanic.....do.	1,800.00	1	1	1		
Mechanic.....do.	1,560.00			1		
Carpenter.....do.	1,800.00	1	1			
Carpenter.....do.	1,740.00			1		
Electrician.....do.	1,800.00	1	1	1		
Engineer.....do.	1,800.00	1	1			
Engineer.....do.	1,680.00			1		
Deckhand.....do.	1,680.00	2	2			
Deckhand.....do.	1,500.00			3		
Laborer, \$150 to \$105.....per month		1	1	2		
Carpenters, brickmasons, electricians, mechanics, laborers, and deckhands, temporary, \$9.50 to \$3.40.....per diem.		22	22	80		
		55	55	113		
Salaries.....	\$50,240.00	\$50,240.00	\$50,240.00	\$61,520.25		
Wages.....	46,980.00	43,860.00	43,860.00	12,720.00		
OTHER OBJECTS OF EXPENDITURE.						
Traveling expenses.....		1,000.00	750.00	1,067.09		
Equipment and material.....		47,500.00	45,000.00	4,382.25		
Miscellaneous items.....		62,780.00	53,050.00	45,581.60		
Total.....		208,500.00	192,900.00	125,271.19		
(39) For general administrative expenses connected with the above-mentioned lines of investigation (<i>acts June 3, 1902, vol. 32, p. 297, sec. 1; May 31, 1920, vol. 41, pp. 713, 714, sec. 1</i>).....					\$4,000.00	
Appropriation for 1912.....	\$4,640	Estimate for 1913.....	4,280			
Appropriation for 1913.....	4,280	Estimate for 1914.....	3,800			
Appropriation for 1914.....	3,800	Estimate for 1915.....	3,200			
Appropriation for 1915.....	3,200	Estimate for 1916.....	4,000			
Appropriation for 1916.....	3,200	Estimate for 1917.....	4,000			
Appropriation for 1917.....	4,000	Estimate for 1918.....	4,000			
Appropriation for 1918.....	4,000	Estimate for 1919.....	4,000			
Appropriation for 1919.....	4,000	Estimate for 1920.....	4,000			
Appropriation for 1920.....	4,000	Estimate for 1921.....	4,000			
Appropriation for 1921.....	4,000	Estimate for 1922.....	4,000			
Other objects of expenditure.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.			
Stationery.....	\$1,250.00	\$1,250.00	\$979.36			
Equipment and material.....	750.00	750.00	420.90			
Telephone and telegraph service.....	400.00	400.00	350.93			
Miscellaneous items.....	1,600.00	1,600.00	1,437.92			
Total.....	4,000.00	4,000.00	3,189.11			
In all, for general expenses.....					\$648,005.00	\$462,975.00
Appropriations for 1912.....	\$213,740	Estimates for 1913.....	\$284,370			
Appropriations for 1913.....	250,880	Estimates for 1914.....	315,400			
Appropriations for 1914.....	280,400	Estimates for 1915.....	299,020			
Appropriations for 1915.....	299,815	Estimates for 1916.....	298,215			
Appropriations for 1916.....	265,515	Estimates for 1917.....	288,735			
Appropriations for 1917.....	433,735	Estimates for 1918.....	291,515			
Appropriations for 1918.....	291,515	Estimates for 1919.....	417,075			
Appropriations for 1919.....	417,075	Estimates for 1920.....	435,735			
Appropriations for 1920.....	417,075	Estimates for 1921.....	539,235			
Appropriations for 1921.....	462,975	Estimates for 1922.....	648,005			
Total for Bureau of Soils.....					732,345.00	542,215.00

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
BUREAU OF ENTOMOLOGY.		
<i>Salaries, Bureau of Entomology—</i>		
(1) One entomologist, who shall be chief of bureau (increase of \$2,500) (<i>R. S., p. 87, secs. 520-523; acts Apr. 14, 1896, vol. 29, p. 100, sec. 1; Apr. 23, 1904, vol. 33, p. 276, sec. 1; May 31, 1920, vol. 41, p. 714, sec. 1</i>) -----	\$7, 500. 00	
NOTE.—An increase of \$2,500 in the salary of the chief of bureau is recommended. See note under item 1, page 19.		
(2) One chief clerk [and executive assistant] (increase of \$500 with change of title) (<i>same acts</i>) -----	2, 750. 00	
NOTE.—An increase of \$500 is requested in the salary of the employee having administrative charge of the clerical work of the bureau. The salary of this position was established in 1914, since which time the bureau appropriations have more than doubled, with a proportionate increase in the responsibilities of this position.		
It is recommended that the words "and executive assistant" be eliminated from the title in order to make it conform with the designation of similar officers in other bureaus of the department.		
(3) Two administrative assistants, at \$2,250 each (increase of 1) (<i>same acts</i>) -----	4, 500. 00	
NOTE.—An additional position of administrative assistant at \$2,250 is submitted in lieu of an editor at the same salary. This change is recommended in order to reduce the number of titles of positions carrying like salaries and to permit greater flexibility in filling the position should a vacancy occur.		
(4) [One editor, \$2,250.]		
NOTE.—See note under item 3.		
(5) [One financial clerk, \$1,800.]		
NOTE.—See note under item 7.		
(6) One executive clerk (<i>submitted</i>) -----	1, 980. 00	
NOTE.—This position and 2 clerks of class 4, 4 clerks of class 3, 3 clerks of class 2, 3 entomological preparators, at \$1,000 each, and 2 entomological preparators, at \$840 each, are submitted in lieu of 6 clerks of class 1, 6 clerks, at \$1,000 each, 8 entomological preparators, at \$720 each, and 2 messengers or laborers, at \$720 each.		
This readjustment involves a net increase of \$460 in the salary roll and a decrease of 7 in the number of places. The \$1,200 positions were originally filled by stenographers in Washington, who were transferred from lump funds when competent stenographic clerks could be secured at that salary. The bureau is now unable to obtain capable stenographers to fill these positions. The six positions at \$1,000 were originally filled by field stenographers on lump funds, who were transferred to the statutory roll at a time when these salaries were sufficient. In order to retain the services of the best class of help it will be necessary to pay higher salaries. If the new places recommended are allowed, the bureau will have a number of the low-salaried positions which it can not use and which should be dropped.		
The salary of \$720 for preparators is too low to retain efficient employees, with the result that those who are appointed do not remain with the bureau long enough to become experienced and useful.		
The two positions for messenger or laborer at \$720 can not be used to advantage, as the class of employees needed will not accept this low salary.		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>Salaries, Bureau of Entomology—Continued.</i>		
(7) Eight clerks, class 4 (increase of 3) (<i>R. S., p. 87, secs. 520-523: acts Apr. 14, 1896, vol. 29, p. 100, sec. 1; Apr. 23, 1904, vol. 33, p. 276, sec. 1; May 31, 1920, vol. 41, p. 714, sec. 1</i>) -----	\$14,400.00	
NOTE.—One additional clerk of class 4 is submitted in lieu of one financial clerk (see item 5), in order to eliminate a superfluous title and to permit greater flexibility in filling the position should a vacancy occur. The other two places are substituted for lower-salaried positions, which have been dropped, as explained in the note under item 6.		
(8) Fourteen clerks, class 3 (increase of 4) (<i>same acts</i>) -----	22,400.00	
NOTE.—See note under item 6.		
(9) Twenty-one clerks, class 2 (increase of 3) (<i>same acts</i>) -----	29,400.00	
NOTE.—See note under item 6.		
(10) Nineteen clerks, class 1 (decrease of 6) (<i>same acts</i>) -----	22,800.00	
NOTE.—See note under item 6.		
(11) 【Six clerks, at \$1,000 each.】		
NOTE.—See note under item 6.		
(12) One insect delineator (<i>same acts</i>) -----	1,600.00	
(13) Two insect delineators, at \$1,400 each (<i>same acts</i>) -----	2,800.00	
(14) Two entomological draftsmen, at \$1,400 each (<i>same acts</i>) ---	2,800.00	
(15) One entomological draftsman (<i>same acts</i>) -----	1,080.00	
(16) One photographer (<i>same acts</i>) -----	1,200.00	
(17) Seven entomological preparators, at \$1,000 each (increase of 3) (<i>same acts</i>) -----	7,000.00	
NOTE.—See note under item 6.		
(18) Six entomological preparators, at \$840 each (increase of 2) (<i>same acts</i>) -----	5,040.00	
NOTE.—See note under item 6.		
(19) 【Eight entomological preparators, at \$720 each.】		
NOTE.—See note under item 6.		
(20) One laborer (<i>same acts</i>) -----	1,080.00	
(21) Two messengers or laborers, at \$900 each (<i>same acts</i>) -----	1,800.00	
(22) One messenger or laborer (<i>same acts</i>) -----	840.00	
(23) One messenger or laborer (decrease of 2) (<i>same acts</i>) -----	720.00	
NOTE.—See note under item 6.		
(24) Six messenger boys, at \$480 each (<i>same acts</i>) -----	2,880.00	
(25) Two charwomen, at \$480 each (<i>same acts</i>) -----	960.00	
(26) Three charwomen, at \$240 each (<i>same acts</i>) -----	720.00	
	<u>\$136,250.00</u>	<u>\$132,790.00</u>

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
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Salaries, Bureau of Entomology—Continued.

Appropriations for 1912.....	\$60,130	Estimates for 1913.....	\$58,630
Appropriations for 1913.....	58,750	Estimates for 1914.....	62,660
Appropriations for 1914.....	60,660	Estimates for 1915.....	68,150
Appropriations for 1915.....	69,050	Estimates for 1916.....	69,050
Appropriations for 1916.....	69,530	Estimates for 1917.....	99,180
Appropriations for 1917.....	99,180	Estimates for 1918.....	103,900
Appropriations for 1918.....	102,180	Estimates for 1919.....	115,330
Appropriations for 1919.....	115,330	Estimates for 1920.....	128,610
Appropriations for 1920.....	124,010	Estimates for 1921.....	138,190
Appropriations for 1921.....	132,790	Estimates for 1922.....	136,250

NOTE.—Apparent increase, \$3,460; actual increase, \$3,460, as follows:

Promotions.

1 chief of bureau, from \$5,000 to \$7,500.....	\$2,500
1 chief clerk and executive assistant, \$2,250, to 1 chief clerk, \$2,750.....	500
	<hr/> \$3,000

New places.

1 administrative assistant.....	2,250
1 executive clerk.....	1,980
3 clerks, class 4.....	5,400
4 clerks, class 3.....	6,400
3 clerks, class 2.....	4,200
3 entomological preparators, at \$1,000 each.....	3,000
2 entomological preparators, at \$840 each.....	1,680
	<hr/> 24,910
	27,910

Places dropped.

1 editor.....	2,250
1 financial clerk.....	1,800
6 clerks, class 1.....	7,200
6 clerks, at \$1,000 each.....	6,000
8 entomological preparators, at \$720 each.....	5,760
2 messengers or laborers, at \$720 each.....	1,440
	<hr/> 24,450
Increase.....	3,460

Change of title.

1 chief clerk and executive assistant, \$2,250, changed to 1 chief clerk, \$2,750.	
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General Expenses, Bureau of Entomology—

- (27) For the promotion of economic entomology; for investigating the history and the habits of insects injurious and beneficial to agriculture, horticulture, arboriculture, and the study of insects affecting the health of man and domestic animals, and ascertaining the best means of destroying those found to be injurious; for collating, digesting, reporting, and illustrating the results of such investigations; for salaries and the employment of labor in the city of Washington and elsewhere, rent outside of the District of Columbia, freight, express charges, official traveling expenses, office fixtures, supplies, apparatus, telegraph and telephone service, gas, and electric current, in connection with the following investigations (*acts June 16, 1880, vol. 21, p. 259, sec. 1; June 3, 1902, vol. 32, p. 298, sec. 1; Mar. 3, 1905, vol. 33, pp. 1269, 1270, secs. 1-3; June 30, 1906, vol. 34, p. 688, sec. 1; May 31, 1920, vol. 41, pp. 714, 715, sec. 1*):

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
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General Expenses, Bureau of Entomology—Continued.

- (28) For investigations of insects affecting deciduous fruits, orchards, vineyards, and nuts ~~[\$178,500]~~ \$198,500 [of which \$30,000 shall be immediately available] (acts June 16, 1880, vol. 21, p. 259, sec. 1; June 3, 1902, vol. 32, p. 298, sec. 1; Mar. 3, 1905, vol. 33, pp. 1269, 1270, secs. 1-3; June 30, 1906, vol. 34, p. 688, sec. 1; May 31, 1920, vol. 41, pp. 714, 715, sec. 1) -----\$198,500.00

Appropriation for 1912.....	\$39,700	Estimate for 1913.....	\$40,600
Appropriation for 1913.....	4,600	Estimate for 1914.....	50,000
Appropriation for 1914.....	45,000	Estimate for 1915.....	59,100
Appropriation for 1915.....	59,100	Estimate for 1916.....	58,000
Appropriation for 1916.....	58,000	Estimate for 1917.....	57,280
Appropriation for 1917.....	60,780	Estimate for 1918.....	78,380
Appropriation for 1918.....	83,380	Estimate for 1919.....	83,380
Appropriation for 1919.....	93,380	Estimate for 1920.....	95,780
Appropriation for 1920.....	105,780	Estimate for 1921.....	103,500
Appropriation for 1921.....	178,500	Estimate for 1922.....	198,500

NOTE.—There is an increase in this item of \$20,000, which it is proposed to use as follows:

(a) \$10,000 for peach insect investigations. The plum curculio during the past two seasons has been very destructive to peach orchards in Georgia, causing during the summer of 1920 a loss of approximately \$2,000,000. The insect has been enormously abundant, and spraying schedules heretofore effective in controlling it have proven to be practically useless. Attacks of this insect also greatly favor the prevalence of brown rot. Extensive investigations and experiments with various sprays and other methods of control should be undertaken. The situation is acute, and requests for assistance have come from numerous growers, representing a very large orchard acreage.

(b) \$10,000 for investigating arsenical spraying practices. During 1919 and 1920 numerous shipments of apples and pears arrived on the markets showing an undesirable amount of arsenical spray residues, and several carloads of such fruits have been held up by certain city and State health officials, with consequent condemnation of the shipments or loss through deterioration because of long delays in releasing the cars. In the case of some fruits, ripening in late summer and early fall, especially pears and apples, the necessity for spraying for second brood codling moth places the orchardist in a dilemma. There is urgent need of inquiry into spray materials and spray practices in the country and for the development of special spraying schedules which will obviate as much as possible the danger of spray residue on harvested fruit.

It will be unnecessary to make any of this appropriation available prior to July 1, next; hence the proviso "of which \$30,000 shall be immediately available" is omitted.

Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.
Salaries:		Number.	Number.	Number.
Entomologist.....per annum..	\$4,500.00	1	1	..
Entomologist.....do.....	4,000.00	..	..	1
Entomologist.....do.....	3,000.00	2	2	..
Entomologist.....do.....	2,820.00	2	1	..
Entomologist.....do.....	2,520.00	2	..	2
Entomologist.....do.....	2,500.00	1	1	1
Scientific assistant.....do.....	2,760.00	..	1	..
Scientific assistant.....do.....	2,520.00	..	1	1
Scientific assistant.....do.....	2,460.00	..	..	1
Scientific assistant.....do.....	2,400.00	1	2	1
Scientific assistant.....do.....	2,280.00	5	5	..
Scientific assistant.....do.....	2,250.00	..	1	2
Scientific assistant.....do.....	2,160.00	4	4	2
Scientific assistant.....do.....	2,000.00	2	..	2
Scientific assistant.....do.....	1,980.00	2	2	6
Scientific assistant.....do.....	1,860.00	1	1	..
Scientific assistant.....do.....	1,800.00	3	3	7
Scientific assistant.....do.....	1,740.00	1	1	5
Scientific assistant.....do.....	1,680.00	..	1	2
Scientific assistant.....do.....	1,620.00	2	..	5
Scientific assistant.....do.....	1,560.00	..	..	2
Scientific assistant.....do.....	1,500.00	1	2	4
Scientific assistant.....do.....	1,400.00	..	..	1
Scientific assistant.....do.....	1,380.00	..	..	1
Scientific assistant.....do.....	1,320.00	..	1	2
Scientific assistant.....do.....	1,260.00	10	3	5
Scientific assistant.....do.....	1,080.00	..	5	2
Specialist.....do.....	3,420.00	1	1	1
Specialist.....do.....	2,400.00	..	1	2
Specialist.....do.....	2,280.00	1	1	..
Specialist.....do.....	1,880.00	..	..	1
Field assistant (temporary).....do.....	1,800.00	..	2	2
Field assistant (temporary).....do.....	1,500.00	..	2	5
Field assistant (temporary).....do.....	1,440.00	..	..	1

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
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General Expenses, Bureau of Entomology—Continued.

Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.
Salaries—Continued.		Number.	Number.	Number.
Field assistant.....per annum..	\$1,400.00	1	1	1
Field assistant (temporary).....do....	1,320.00	2	2	8
Field assistant (temporary).....do....	1,200.00	50	26	9
Field assistant (temporary).....do....	1,080.00	7	7	12
Clerk.....do.....	2,250.00	1	1	1
Clerk.....do.....	1,980.00	1	1	1
Clerk.....do.....	1,200.00	1	1	1
Collaborators, agents, field assistants, and clerks, \$960 to \$12.....do.....		4	7	17
Wages:				
Fireman.....do.....	1,080.00	1	1	1
Laborers, inspectors, scouts, etc., \$1.50 to \$3.....per diem.....		50	50	19
		148	140	136
Salaries.....		\$122,642.00	\$121,004.00	\$82,804.94
Wages.....		19,000.00	19,279.00	7,810.00
OTHER OBJECTS OF EXPENDITURE.				
Stationery.....		200.00	200.00	
Traveling expenses.....		35,000.00	10,800.00	11,326.10
Equipment and material.....		9,950.00	6,517.00	6,300.16
Telephone and telegraph service.....		800.00	700.00	
Miscellaneous items.....		10,908.00	20,000.00	32,895.65
Total.....		198,500.00	178,500.00	141,136.85

(29) For investigations of insects affecting cereal and forage crops, including a special investigation of the Hessian fly and the chinch bug [§145 660] (*acts June 16, 1880, vol. 21, p. 259, sec. 1; June 3, 1902, vol. 32, p. 298, sec. 1; Mar. 3, 1905, vol. 33, pp. 1269, 1270, secs. 1-3; June 30, 1906, vol. 34, p. 688, sec. 1; May 31, 1920, vol. 41, pp. 714, 715, sec. 1*)..... \$165,660.00

Appropriation for 1912.....	\$50,000	Estimate for 1913.....	\$50,000
Appropriation for 1913.....	75,000	Estimate for 1914.....	80,000
Appropriation for 1914.....	90,000	Estimate for 1915.....	114,500
Appropriation for 1915.....	114,500	Estimate for 1916.....	114,500
Appropriation for 1916.....	114,500	Estimate for 1917.....	109,660
Appropriation for 1917.....	114,650	Estimate for 1918.....	123,260
Appropriation for 1918.....	123,260	Estimate for 1919.....	122,060
Appropriation for 1919.....	122,060	Estimate for 1920.....	147,060
Appropriation for 1920.....	147,060	Estimate for 1921.....	155,660
Appropriation for 1921.....	145,660	Estimate for 1922.....	165,660

NOTE.—It is proposed to use the increase of \$20,000 recommended in this item as follows:

(a) \$10,000 to meet the increased cost of general cereal and forage insect investigations. During the past two years the cost of railroad travel, labor, materials, and supplies has greatly advanced, without corresponding increase in the appropriation for these investigations. In order to meet this additional cost of operation it has been necessary to curtail the work and reduce the personnel materially, although the department is constantly receiving requests for assistance in the control of cereal and forage insect outbreaks. The field work conducted under this activity involves the maintenance of 13 stations distributed throughout the United States, and the investigations entail a large amount of travel and considerable outlay for labor, materials, and supplies.

(b) \$10,000 for extension of alfalfa-weevil investigations. This amount is needed to conduct a survey to determine the present area infested by the alfalfa weevil. During the past two years the weevil has been spreading at a rapid rate. It has been discovered in western Colorado and eastern Oregon and very recently has appeared at two points in Nevada, where it was hitherto not known to exist. It has also extended its range into Idaho and is believed to be present at other points more or less remote from the original seat of infestation, near Salt Lake, Utah. It is of great importance to determine as soon as possible the limits of the present infestation, in order that the department may consider the advisability of revising the quarantine regulations and initiating a more active campaign for control, if the proposed survey shows this to be necessary. A small part of the increase requested will also be used for a more complete demonstration of the new effective method of control of this insect by spraying recently announced by the department.

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.					Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Bureau of Entomology—Continued.</i>						
Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.		
Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>		
Entomologist.....per annum	\$4,000.00	1	1			
Entomologist (part time).....do	3,750.00			1		
Specialist.....do	3,420.00			1		
Specialist.....do	1,800.00			2		
Scientific assistant.....do	3,000.00	2	2			
Scientific assistant.....do	2,760.00	2	2			
Scientific assistant.....do	2,520.00	1	1			
Scientific assistant.....do	2,500.00	1		2		
Scientific assistant.....do	2,160.00			1		
Scientific assistant.....do	2,280.00	1	1	1		
Scientific assistant.....do	2,250.00			2		
Scientific assistant.....do	2,220.00	7	7	1		
Scientific assistant (part time).....do	2,200.00			1		
Scientific assistant.....do	2,160.00	1	1	1		
Scientific assistant.....do	2,040.00	5	5	2		
Scientific assistant.....do	2,000.00	1		2		
Scientific assistant.....do	1,980.00	1		3		
Scientific assistant.....do	1,920.00			4		
Scientific assistant.....do	1,800.00	7	4	7		
Scientific assistant.....do	1,680.00	7	6	3		
Scientific assistant.....do	1,620.00	1	1	2		
Scientific assistant.....do	1,600.00	1		2		
Scientific assistant.....do	1,560.00			6		
Scientific assistant.....do	1,500.00	2	2	6		
Scientific assistant.....do	1,440.00	8	3			
Scientific assistant.....do	1,400.00	1	2	3		
Scientific assistant.....do	1,300.00	2				
Scientific assistant.....do	1,200.00	5	5	9		
Field assistant (temporary).....do	1,800.00		1	2		
Field assistant (temporary).....do	1,500.00		1			
Field assistant (temporary).....do	1,270.00			1		
Field assistant (temporary).....do	1,080.00		2	2		
Cataloguer.....do	1,400.00	1	1			
Cataloguer.....do	1,200.00			1		
Laboratory assistant.....do	1,080.00	1	1	3		
Photographer.....do	1,800.00	1	1			
Photographer.....do	1,600.00			1		
Clerks (temporary), \$1,930 to \$1,000.....do			1	7		
Field assistants, preparators, and collaborators, \$900 to \$12.....do		5	7	12		
Wages:						
Fireman.....do	1,080.00			1		
Laborer.....do	1,080.00			1		
Laborers, \$900 to \$540.....do		3	4	6		
		68	62	99		
Salaries.....		\$111,092.00	\$78,497.00	\$93,903.85		
Wages.....		2,160.00	2,940.00	3,797.50		
OTHER OBJECTS OF EXPENDITURE.						
Traveling expenses.....		28,000.00	24,480.00	18,118.44		
Equipment and material.....		10,000.00	15,000.00	4,640.27		
Miscellaneous items.....		11,408.00	24,743.00	21,294.77		
Total.....		615,660.00	145,660.00	141,754.83		

- (30) For investigations of insects affecting southern field crops, including insects affecting cotton, tobacco, rice, sugar cane, and so forth, and the cigarette beetle and Argentine ant, **[\$125,000]** \$175,000, of which sum \$25,000 shall be immediately available (*acts June 16, 1880, vol. 21, p. 259, sec. 1; June 3, 1902, vol. 32, p. 298, sec. 1; Mar. 3, 1905, vol. 33, pp. 1269, 1270, secs. 1-3; June 30, 1906, vol. 34, p. 688, sec. 1; May 31, 1920, vol. 41, pp. 714, 715, sec. 1*) ..\$175,000.00

Appropriation for 1912.....	\$47,160	Estimate for 1913.....	\$47,160
Appropriation for 1913.....	47,160	Estimate for 1914.....	50,000
Appropriation for 1914.....	50,000	Estimate for 1915.....	49,000
Appropriation for 1915.....	59,000	Estimate for 1916.....	69,000
Appropriation for 1916.....	59,000	Estimate for 1917.....	64,400
Appropriation for 1917.....	64,400	Estimate for 1918.....	74,400
Appropriation for 1918.....	89,400	Estimate for 1919.....	89,400
Appropriation for 1919.....	89,400	Estimate for 1920.....	85,400
Appropriation for 1920.....	100,400	Estimate for 1921.....	178,400
Appropriation for 1921.....	125,000	Estimate for 1922.....	175,000

NOTE.—An increase of \$50,000 is requested in this item for extending the investigations of cotton boll weevil control by means of powdered calcium arsenate. It has been demonstrated in a limited area of the cotton belt that a fair degree of control over the weevil can be secured by dusting the cotton with this insecticide. In some cases the yield of cotton has been practically doubled by its application. It has been found, however, that to be successful the method will have to be varied to suit different environments and conditions in the cotton belt.

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.					Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Bureau of Entomology—Continued.</i>						
<p>The several applications of the poison, which are always necessary to successful control, entail under existing prices of materials and machinery heavy outlays of funds. If the right methods are used the resulting increase in the value of the crop will much more than justify this initial expense. Otherwise there is absolutely no return from the investment. The immediate result upon a community of one such failure tends to bring the whole system of poison control into disrepute and retard progress in the use of more carefully determined methods. For this reason it is desirable to establish eight field stations in various sections of the cotton belt, as follows: Southern Louisiana, central Mississippi, southern Alabama, eastern Georgia, southern South Carolina, south Texas coastal district, Rio Grande Valley, and central Texas black-waxy prairies.</p> <p>At the outset of the department's first large-scale tests of this method of boll-weevil control no suitable machinery for application of the poison was on the market. A machine shop was established in connection with the field station at Tullulah, La., which has aided very materially in developing suitable models of machines for manufacture. This work is handicapped, however, by lack of sufficient funds. Better and cheaper machines should be devised. This will benefit especially the small farmers, who at present find the outlay for machinery to be especially burdensome.</p> <p>It is recommended that \$25,000 of the appropriation be made immediately available in order that work in the establishment of new stations, appointment of assistants, purchase of machinery, etc., may be started early in the spring in preparation for the summer campaign.</p>						
Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.		
Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>		
Entomologist.....per annum..	\$4,500.00	1	1			
Entomologist.....do.....	4,000.00			1		
Entomologist.....do.....	3,250.00	2	2			
Entomologist.....do.....	3,000.00	1	1	1		
Entomologist.....do.....	2,760.00	1	1			
Entomologist.....do.....	2,750.00			1		
Specialist.....do.....	3,000.00			1		
Specialist.....do.....	2,280.00		1			
Field superintendent.....do.....	2,200.00	1		1		
Field superintendent.....do.....	2,000.00	8				
Scientific assistant.....do.....	2,760.00			1		
Scientific assistant.....do.....	2,520.00	1	1	2		
Scientific assistant.....do.....	2,400.00	1	1			
Scientific assistant.....do.....	2,250.00			1		
Scientific assistant.....do.....	2,220.00	1	3			
Scientific assistant.....do.....	2,040.00	1	1			
Scientific assistant.....do.....	2,000.00	6	4			
Scientific assistant.....do.....	1,980.00	1	1	3		
Scientific assistant.....do.....	1,920.00			1		
Scientific assistant.....do.....	1,860.00	1	1			
Scientific assistant.....do.....	1,800.00	3	2	3		
Scientific assistant.....do.....	1,740.00			1		
Scientific assistant.....do.....	1,680.00	1	1	1		
Scientific assistant.....do.....	1,620.00	1	1	3		
Scientific assistant.....do.....	1,600.00	3	1	1		
Scientific assistant.....do.....	1,560.00			1		
Scientific assistant.....do.....	1,500.00			1		
Scientific assistant.....do.....	1,400.00	1				
Scientific assistant.....do.....	1,380.00	1	1	2		
Scientific assistant.....do.....	1,200.00	1	1	4		
Mechanical engineer.....do.....	2,400.00	1	1	1		
Laboratory assistant.....do.....	1,380.00	1				
Laboratory assistant.....do.....	1,200.00	2				
Laboratory assistant.....do.....	1,080.00			1		
Field assistants (temporary), \$1,800 to \$1,000.....do.....		33	30	24		
Clerk.....do.....	1,980.00		1			
Clerk.....do.....	1,200.00			2		
Collaborators, \$12 to \$1.....do.....			7	5		
Agents, entomological preparator, field assistants, clerks, and messenger boy, \$900 to \$400.....do.....		6	5	20		
Wages:						
Machinist.....do.....	1,800.00	1	1			
Fireman.....do.....	1,080.00			1		
Laborers, \$900 to \$420.....do.....		3	4	4		
		84	74	88		
Salaries.....		\$93,590.00	\$69,542.00	\$57,696.66		
Wages.....		3,840.00	4,450.00	2,145.17		
OTHER OBJECTS OF EXPENDITURE.						
Stationery.....		1,000.00	1,000.00	1,125.75		
Traveling expenses.....		35,000.00	23,500.00	26,722.26		
Equipment and material.....		10,000.00	10,000.00	3,451.25		
Miscellaneous items.....		31,570.00	16,508.00	16,735.84		
Total.....		175,000.00	125,000.00	107,876.93		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
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General Expenses, Bureau of Entomology—Continued.

- (31) For investigations of insects affecting forests **[\$40,000]**
(acts June 16, 1880, vol. 21, p. 259, sec. 1; June 3, 1902, vol. 32, p. 298, sec. 1; Mar. 3, 1905, vol. 33, pp. 1269, 1270, secs. 1-3; June 30, 1906, vol. 34, p. 688, sec. 1; May 31, 1920, vol. 41, pp. 714, 715, sec. 1) \$67,500.00

Appropriation for 1912.....	\$44,750	Estimate for 1913.....	\$44,750
Appropriation for 1913.....	44,750	Estimate for 1914.....	50,000
Appropriation for 1914.....	44,750	Estimate for 1915.....	54,790
Appropriation for 1915.....	54,790	Estimate for 1916.....	54,790
Appropriation for 1916.....	54,790	Estimate for 1917.....	50,770
Appropriation for 1917.....	50,770	Estimate for 1918.....	50,770
Appropriation for 1918.....	50,770	Estimate for 1919.....	49,870
Appropriation for 1919.....	49,870	Estimate for 1920.....	48,790
Appropriation for 1920.....	48,790	Estimate for 1921.....	47,590
Appropriation for 1921.....	40,000	Estimate for 1922.....	67,500

NOTE.—There is an increase in this item of \$27,500, which it is proposed to use as follows:

(a) \$15,000 for investigations of insects affecting forest trees. It is estimated that tree-killing insects cause an annual loss of \$70,000,000 in commercial timber alone. When the loss caused in the national forests and national parks is considered, this amount is much greater. The increase recommended for this project is needed for extending the cooperation with the Forest Service in the control of bark beetles attacking yellow and sugar pines, for which purpose a field station will need to be established and two additional men employed; to survey and determine the extent of serious depredations by bark beetles in Klamath County, Oreg., with a view to the application of control measures; to investigate the defoliation of Sitka spruce and hemlock which occurs yearly along the Oregon and Washington coasts and in the Tongass National Forest in Alaska; to investigate the European pine shoot moth, which has become established in Long Island, Connecticut, Rhode Island, parts of New York, New Jersey, and Pennsylvania, and is spreading to new localities; and to investigate the white pine weevil, which causes more damage to white pines in the New England States than all other injury, including the white-pine blister rust, as well as other weevils and white grub. In connection with the last-mentioned activity, a field station should be located in New England to study methods of controlling these destructive insects.

(b) \$7,500 for investigations of insects affecting forest products. Insects cause an annual loss of \$30,000,000 to forest products, much of which could be avoided if proper preventive measures were applied. An extensive study should be made of the character and extent of damage by wood-boring insects to ash logs in the Southern States, with a view to institute changes in the handling of these logs to prevent insect damage. Studies should be made of damage to saw logs before manufacture and to green lumber by various types of insects, particularly Ambrosia beetles, on which subject the department receives from all sections of the country urgent requests for information and assistance. Powder-post insects, which cause losses of from 5 to 50 per cent to seasoned stored hardwood products, should receive more serious attention, as should a number of problems relating to chemical wood preservatives needed for the treatment of wood to prevent attacks by "white ants" or termites, the most destructive timber insects in the world.

(c) \$5,000 for investigations of insects affecting shade trees and hardy shrubs. It is estimated that shade tree insects cause a direct financial loss in this country of \$10,000,000 annually. The department has never had a direct appropriation for the investigation of insects injurious to shade trees and hardy shrubs, and the work heretofore has necessarily been limited largely to correspondence. There is a constantly increasing demand for information on this subject and urgent need for field investigations and demonstrational control work, in cooperation with various cities and communities. Information regarding the habits of shade tree insects of the country is very meager, and very little experimental work has been done in controlling them.

Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.
Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>
Forest entomologist.....per annum..	\$4,380.00	1	1	.....
Forest entomologist.....do.....	4,000.00	.....	.....	1
Specialist.....do.....	2,760.00	3	3	.....
Specialist.....do.....	2,500.00	1	1	1
Specialist.....do.....	2,250.00	1	1	3
Specialist.....do.....	2,160.00	.....	1	.....
Specialist.....do.....	2,000.00	3	.....	.....
Specialist.....do.....	1,920.00	.....	.....	1

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.																																																																																																																																																						
<i>General Expenses, Bureau of Entomology—Continued.</i>																																																																																																																																																								
<table><tr><th>Employees.</th><th>Rate.</th><th>Esti- mated, 1922.</th><th>Appro- priated, 1921.</th><th>Ex- pended, 1920.</th></tr><tr><td colspan="5">Salaries—Continued.</td></tr><tr><td>Specialist.....per annum.....</td><td>\$1,800.00</td><td><i>Number.</i> 1</td><td><i>Number.</i></td><td><i>Number.</i> 1</td></tr><tr><td>Specialist.....do.....</td><td>1,500.00</td><td>2</td><td></td><td></td></tr><tr><td>Expert.....do.....</td><td>2,250.00</td><td></td><td></td><td>1</td></tr><tr><td>Assistant.....do.....</td><td>2,760.00</td><td>1</td><td>1</td><td></td></tr><tr><td>Assistant.....do.....</td><td>2,500.00</td><td></td><td></td><td>1</td></tr><tr><td>Assistant.....do.....</td><td>2,250.00</td><td></td><td></td><td>1</td></tr><tr><td>Assistant.....do.....</td><td>1,710.00</td><td></td><td></td><td>1</td></tr><tr><td>Assistant.....do.....</td><td>1,600.00</td><td></td><td></td><td>1</td></tr><tr><td>Scientific assistant.....do.....</td><td>1,980.00</td><td>1</td><td></td><td></td></tr><tr><td>Scientific assistant.....do.....</td><td>1,680.00</td><td>1</td><td>1</td><td></td></tr><tr><td>Scientific assistant.....do.....</td><td>1,800.00</td><td></td><td>1</td><td></td></tr><tr><td>Scientific assistant.....do.....</td><td>1,740.00</td><td>1</td><td>1</td><td></td></tr><tr><td>Scientific assistant.....do.....</td><td>1,400.00</td><td>2</td><td>1</td><td>2</td></tr><tr><td>Scientific assistant.....do.....</td><td>1,380.00</td><td>1</td><td>1</td><td>2</td></tr><tr><td>Scientific assistant.....do.....</td><td>1,300.00</td><td></td><td></td><td>1</td></tr><tr><td>Scientific assistants.....do.....</td><td>1,200.00</td><td></td><td></td><td>2</td></tr><tr><td>Entomological ranger.....do.....</td><td>1,500.00</td><td>1</td><td>1</td><td></td></tr><tr><td>Entomological ranger.....do.....</td><td>1,200.00</td><td>3</td><td>3</td><td>4</td></tr><tr><td>Laboratory assistant.....do.....</td><td>1,000.00</td><td></td><td></td><td></td></tr><tr><td>Clerk.....do.....</td><td>1,200.00</td><td></td><td></td><td>1</td></tr><tr><td>Entomological preparators and collaborators— \$720 to \$1.....do.....</td><td></td><td>5</td><td>5</td><td>7</td></tr><tr><td></td><td></td><td>29</td><td>23</td><td>32</td></tr><tr><td>Salaries.....</td><td></td><td>\$46,779.00</td><td>\$34,859.00</td><td>\$41,765.50</td></tr><tr><td colspan="5">OTHER OBJECTS OF EXPENDITURES.</td></tr><tr><td>Traveling expenses.....</td><td></td><td>10,000.00</td><td>1,919.00</td><td>3,819.93</td></tr><tr><td>Equipment and material.....</td><td></td><td>3,570.00</td><td>1,700.00</td><td></td></tr><tr><td>Miscellaneous items.....</td><td></td><td>7,151.00</td><td>1,522.00</td><td>2,663.87</td></tr><tr><td>Total.....</td><td></td><td>67,500.00</td><td>40,000.00</td><td>48,249.30</td></tr></table>	Employees.	Rate.	Esti- mated, 1922.	Appro- priated, 1921.	Ex- pended, 1920.	Salaries—Continued.					Specialist.....per annum.....	\$1,800.00	<i>Number.</i> 1	<i>Number.</i>	<i>Number.</i> 1	Specialist.....do.....	1,500.00	2			Expert.....do.....	2,250.00			1	Assistant.....do.....	2,760.00	1	1		Assistant.....do.....	2,500.00			1	Assistant.....do.....	2,250.00			1	Assistant.....do.....	1,710.00			1	Assistant.....do.....	1,600.00			1	Scientific assistant.....do.....	1,980.00	1			Scientific assistant.....do.....	1,680.00	1	1		Scientific assistant.....do.....	1,800.00		1		Scientific assistant.....do.....	1,740.00	1	1		Scientific assistant.....do.....	1,400.00	2	1	2	Scientific assistant.....do.....	1,380.00	1	1	2	Scientific assistant.....do.....	1,300.00			1	Scientific assistants.....do.....	1,200.00			2	Entomological ranger.....do.....	1,500.00	1	1		Entomological ranger.....do.....	1,200.00	3	3	4	Laboratory assistant.....do.....	1,000.00				Clerk.....do.....	1,200.00			1	Entomological preparators and collaborators— \$720 to \$1.....do.....		5	5	7			29	23	32	Salaries.....		\$46,779.00	\$34,859.00	\$41,765.50	OTHER OBJECTS OF EXPENDITURES.					Traveling expenses.....		10,000.00	1,919.00	3,819.93	Equipment and material.....		3,570.00	1,700.00		Miscellaneous items.....		7,151.00	1,522.00	2,663.87	Total.....		67,500.00	40,000.00	48,249.30		
Employees.	Rate.	Esti- mated, 1922.	Appro- priated, 1921.	Ex- pended, 1920.																																																																																																																																																				
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Total.....		67,500.00	40,000.00	48,249.30																																																																																																																																																				

- (32) For investigations of insects affecting truck crops, including insects affecting the potato, sugar beet, cabbage, onion, tomato, beans, peas, and so forth [and insects affecting stored products, \$110,000], \$120,000, of which sum \$15,000 shall be immediately available (acts June 16, 1880, vol. 21, p. 259, sec. 1; June 3, 1902, vol. 32, p. 298, sec. 1; Mar. 3, 1905, vol. 33, pp. 1269, 1270, secs. 1-3; June 30, 1906, vol. 34, p. 688, sec. 1; May 31, 1920, vol. 41, pp. 714, 715, sec. 1).....\$120,000.00

Appropriation for 1912.....	\$19,100	Estimate for 1913.....	\$19,700
Appropriation for 1913.....	30,000	Estimate for 1914.....	35,000
Appropriation for 1914.....	35,000	Estimate for 1915.....	41,500
Appropriation for 1915.....	41,500	Estimate for 1916.....	41,500
Appropriation for 1916.....	41,500	Estimate for 1917.....	37,760
Appropriation for 1917.....	42,760	Estimate for 1918.....	47,760
Appropriation for 1918.....	47,760	Estimate for 1919.....	67,760
Appropriation for 1919.....	67,760	Estimate for 1920.....	84,960
Appropriation for 1920.....	134,960	Estimate for 1921.....	131,760
Appropriation for 1921.....	110,000	Estimate for 1922.....	120,000

NOTE.—It is proposed to separate from this item that portion relating to the investigation of insects affecting stored products, which has been set up as a new item (No. 33). Of the present appropriation of \$110,000 carried by this paragraph, \$80,000 is used for truck-crop insect investigations and \$30,000 for stored-product insect investigations. Since item 32, as amended, covers only truck-crop insect investigations, the actual increase recommended for that work is \$40,000. It is proposed to use this entire amount for the control of the sweet-potato weevil, \$30,000 of which sum will be required for reestablishing the inspection work in Texas and Louisiana. The remaining \$10,000 will provide necessary additional inspectors and equipment for the effective continuation of the work in Mississippi, Florida, Alabama, and Georgia.

The sweet-potato weevil work was begun in 1917 and was vigorously and successfully prosecuted to the end of the last fiscal year. The infested areas in Mississippi, Alabama, and the Florida-Georgia section have been materially reduced, indications being that Alabama is now practically weevil free. The limits of infestation for the United States have been thoroughly established. Plans were also made for host-plant eradication in the infested areas of the six Gulf States as an important measure to prevent reinfestation. A reduction of approximately \$30,000 in the funds available for this work during the current fiscal year has made it necessary to practically abandon the work undertaken in previous years in Texas and Louisiana, two of the States most seriously infested by the weevil. No cooperation has been possible from these States owing to lack of State funds. The four remaining States, because they were able to provide appropriations, were selected for this year's

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
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General Expenses, Bureau of Entomology—Continued.

coöperative work. With the limited Federal funds available this year, however, it has been extremely difficult to maintain the foothold already established by the preceding three years' work in the principal eradication projects in the four cooperating States where, owing to the localized distribution of the weevil, particularly favorable results might have been obtained had adequate appropriations been provided. Unless increased funds are appropriated for conducting this work on the scale originally planned there is grave danger that the results gained from three years of effort in weevil control will be lost through reinfestation, and that it will be impossible to again place the work on the efficient basis which it now occupies.

It is recommended that \$15,000 of the appropriation for next year be made immediately available in order that important early spring operations may be started in advance of the appearance of the weevil. During the spring months final clean-up measures should be undertaken and the distribution of weevil-free draws accomplished.

Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.
Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>
Entomologist.....per annum..	\$4,380.00	1	1	
Entomologist.....do.....	4,000.00			1
Entomologist.....do.....	3,000.00	1	1	
Entomologist.....do.....	2,880.00	1	1	
Entomologists.....do.....	2,500.00			2
Scientific assistant.....do.....	2,400.00	1	1	1
Scientific assistant.....do.....	2,250.00	1	1	
Scientific assistant.....do.....	2,200.00			1
Scientific assistant.....do.....	2,100.00	8	8	
Scientific assistant.....do.....	2,000.00	3		2
Scientific assistant.....do.....	1,980.00			2
Scientific assistant.....do.....	1,860.00	1	1	
Scientific assistant.....do.....	1,800.00	3	2	8
Scientific assistant.....do.....	1,740.00	1	1	1
Scientific assistant.....do.....	1,680.00	1	1	1
Scientific assistant.....do.....	1,620.00			1
Scientific assistant.....do.....	1,600.00	3	3	2
Scientific assistant.....do.....	1,560.00	2	2	
Scientific assistant.....do.....	1,500.00	10		5
Scientific assistant.....do.....	1,440.00			2
Scientific assistant.....do.....	1,400.00	3	1	4
Scientific assistant.....do.....	1,380.00			1
Scientific assistant.....do.....	1,200.00			2
Scientific assistant.....do.....	1,080.00			1
Scientific assistant.....do.....	1,000.00			1
Laboratory assistant.....do.....	1,320.00	1	1	
Laboratory assistant.....do.....	1,200.00	1		
Laboratory assistant.....do.....	1,080.00	1	1	3
Clerk.....do.....	1,800.00	1	1	1
Clerk.....do.....	1,500.00	1	1	1
Clerk.....do.....	1,080.00			1
Field assistants and collaborators— \$840 to \$12.....do.....		18	13	11
Wages:				
Gardener.....do.....	1,080.00	1	1	1
Fireman.....do.....	1,080.00			1
Laborers, \$840 to \$540.....do.....		1	1	3
		65	43	60
Salaries.....		\$87,510.00	\$58,502.00	\$65,400.45
Wages.....		1,920.00	540.00	848.00
OTHER OBJECTS OF EXPENDITURE.				
Traveling expenses.....		20,000.00	13,765.00	27,007.20
Equipment and material.....		5,000.00	3,000.00	4,047.99
Miscellaneous items.....		5,570.00	4,193.00	7,794.52
Total.....		120,000.00	80,000.00	105,098.16

- (33) *For investigations of insects affecting stored grain, cereals, and other food products, and insects affecting the household (submitted)*.....\$40,000.00

NOTE.—While this appears as a new item, it merely provides for a continuance of work formerly prosecuted under the preceding item. During the present fiscal year an allotment of \$30,000 is made for the work so that the amount recommended represents an actual increase of only \$10,000. It is proposed to use this additional amount as follows:

(a) \$5,500 for investigations of insects affecting dried fruits and vegetables. The development of the dried fruit and vegetable industry has grown largely within the last few years. In connection with the dehydration investigations of the Bureau of Chemistry, that bureau has requested cooperation in the control of insects which infest dried fruits and vegetables, in order that serious damage to such products may be averted. If funds are made available for the purpose, it is proposed to assign an

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
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General Expenses, Bureau of Entomology—Continued.

expert, with headquarters at one of the large dehydration plants, to study the insects affecting dried fruits with a view to the development of methods for their control.

(b) \$4,500 for investigations of insects injurious to stored products in warehouses. It is estimated that 20 per cent of the food products and other supplies stored in warehouses are lost through insect attacks. Warehousemen in general are ignorant of the causes of such losses and methods of prevention. While limited studies have been carried on for some years, it is proposed to centralize these efforts in an investigation which should be productive of results of practical and immediate value to warehouse interests.

Employees.	Rate.	Esti- mated, 1922.	Appro- priated, 1921.	Ex- pended, 1920.
Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>
Entomologist.....per annum..	\$3,750.00	1	1	
Entomologist.....do.....	3,240.00			1
Entomologist.....do.....	3,000.00	1	1	
Entomologist.....do.....	2,500.00			1
Scientific assistant.....do.....	2,400.00	1	1	
Scientific assistant.....do.....	2,250.00	1	1	
Scientific assistant.....do.....	2,200.00	1		
Scientific assistant.....do.....	2,000.00	2	1	1
Scientific assistant.....do.....	1,980.00			3
Scientific assistant.....do.....	1,800.00	2	1	1
Scientific assistant.....do.....	1,620.00			1
Scientific assistant.....do.....	1,600.00	1		1
Scientific assistant.....do.....	1,580.00			1
Scientific assistant.....do.....	1,560.00			1
Field assistant.....do.....	1,700.00	1		1
Laboratory assistant.....do.....	1,080.00			1
Collaborator.....do.....	300.00	1		
		13	6	13
Salaries.....		\$26,600.00	\$15,200.00	\$18,328.83
OTHER OBJECTS OF EXPENDITURE.				
Traveling expenses.....		5,000.00	5,000.00	3,895.38
Equipment and material.....		2,500.00	2,500.00	2,608.76
Miscellaneous items.....		5,900.00	7,300.00	3,020.27
Total.....		40,000.00	30,000.00	27,853.24

- (34) For investigations and demonstrations in bee culture
 [\$33,800] (*acts June 16, 1880, vol. 21, p. 259, sec. 1; June 3, 1902, vol. 32, p. 298, sec. 1; Mar. 3, 1905, vol. 33, pp. 1269, 1270, secs. 1-3; June 30, 1906, vol. 34, p. 688, sec. 1; May 31, 1920, vol. 41, pp. 714, 715, sec. 1*) \$38,800.00

Appropriation for 1912.....	\$15,000	Estimate for 1913.....	\$15,000
Appropriation for 1913.....	15,000	Estimate for 1914.....	16,000
Appropriation for 1914.....	15,000	Estimate for 1915.....	21,500
Appropriation for 1915.....	15,000	Estimate for 1916.....	15,000
Appropriation for 1916.....	15,000	Estimate for 1917.....	15,000
Appropriation for 1917.....	20,000	Estimate for 1918.....	20,000
Appropriation for 1918.....	20,000	Estimate for 1919.....	35,000
Appropriation for 1919.....	35,000	Estimate for 1920.....	35,000
Appropriation for 1920.....	35,000	Estimate for 1921.....	33,800
Appropriation for 1921.....	33,800	Estimate for 1922.....	38,800

NOTE.—There is an increase in this item of \$5,000. Beekeeping practices in various parts of the United States differ materially because of the variation in the plant sources from which nectar is derived, time of blooming, character and amount of nectar, differences in soil which have an influence on the amount and character of nectar, and climatic differences. It is proposed to determine more accurately the chief sources of honey for each important beekeeping region and especially to study the methods of handling bees so that they may be in condition to gather the maximum crop from each source. This necessitates not only a study of the local honey flora but especially the adaptation of recognized principles of wintering bees, swarm control, disease control, and other beekeeping practices to fit the manipulations to local conditions. This investigation will be of inestimable value to the extension work in beekeeping.

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
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General Expenses, Bureau of Entomology—Continued.

Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.
Salaries:		Number.	Number.	Number.
Apiculturist.....per annum..	\$1,380.00	1	1	
Apiculturist.....do.....	4,000.00			1
Apiculturist.....do.....	2,250.00	1	1	
Assistant.....do.....	3,250.00	1	1	
Assistant.....do.....	3,000.00			1
Assistant.....do.....	2,250.00	1	1	
Assistant.....do.....	1,800.00			1
Specialist.....do.....	2,500.00	1		
Specialist.....do.....	2,400.00	1	1	
Specialist.....do.....	2,000.00	1		
Specialist.....do.....	1,980.00			1
Specialist.....do.....	1,800.00	1		
Field agent.....do.....	2,000.00			3
Field agent.....do.....	1,800.00	1		
Field agent.....do.....	1,600.00	1		1
Field agent.....do.....	1,400.00	1	1	2
Field agent.....do.....	1,200.00			1
Agent.....do.....	2,000.00	1	1	1
Agent.....do.....	1,620.00	1	1	
Agent.....do.....	1,560.00	2	2	1
Agent.....do.....	1,500.00	1	1	
Agent.....do.....	1,440.00			1
Clerk.....do.....	1,400.00		1	1
Clerk.....do.....	1,200.00			1
Clerks, agents, and collaborators, \$900 to \$12.....do.....		5	2	5
		22	14	21
Salaries.....		\$35,244.00	\$25,594.00	\$26,996.45
OTHER OBJECTS OF EXPENDITURE.				
Traveling expenses.....		2,000.00	1,800.00	2,518.18
Equipment and material.....		300.00	500.00	
Miscellaneous items.....		1,256.00	5,906.00	2,916.90
Total.....		38,800.00	33,800.00	32,431.53

(35) For investigations of insects affecting citrus and other tropical and subtropical fruits, including the Mediterranean and other fruit flies and the camphor thrip [\$51 500] (acts June 16, 1880, vol. 21, p. 259, sec. 1; June 3, 1902, vol. 32, p. 298, sec. 1; Mar. 3, 1905, vol. 33, pp. 1269, 1270, secs. 1-3; June 30, 1906, vol. 34, p. 688, sec. 1; May 31, 1920, vol. 41, pp. 714, 715, sec. 1)..... \$66, 500. 00

Appropriation for 1912.....	\$19,740	Estimate for 1913.....	\$19,740
Appropriation for 1913.....	21,500	Estimate for 1914.....	25,000
Appropriation for 1914.....	21,500	Estimate for 1915.....	20,100
Appropriation for 1915.....	20,100	Estimate for 1916.....	20,100
Appropriation for 1916.....	20,100	Estimate for 1917.....	17,100
Appropriation for 1917.....	17,100	Estimate for 1918.....	25,000
Appropriation for 1918.....	17,100	Estimate for 1919.....	16,500
Appropriation for 1919.....	16,500	Estimate for 1920.....	16,500
Appropriation for 1920.....	16,500	Estimate for 1921.....	24,500
Appropriation for 1921.....	51,500	Estimate for 1922.....	66,500

NOTE.—There is an increase in this item of \$15,000, which it is proposed to use as follows:

(a) \$3,000 for citrus-fruit insect investigations in California. Heretofore the work done under this project has had special reference to the standardization of hydrocyanic-acid gas for orchard control of citrus insects. There is a very great need for the expansion of this work to adequately cover the field. The recent development of liquid hydrocyanic acid has introduced an entirely new phase in the remedial work, involving the standardization of methods for its production and safe use in orchard and fumigation work. Other special lines of investigation, which have been scarcely touched, are the control of the citrus mealy bug and the Argentine ant. The latter, by reason of its symbiotic relation to the citrus mealy bug, can be investigated in connection with the mealy bug.

(b) \$1,800 for citrus-fruit insect investigations in Florida. This work has for its object the determination of practical methods for the control of the white fly and of scales and other insects which affect the citrus industry in Florida. A very strong demand has arisen for the enlargement of this work in Florida and its extension to other Gulf States, and the increase requested is necessary for this purpose.

(c) \$3,000 for investigations of insects affecting the avocado, guava, mango, and other tropical and subtropical fruits. This is a comparatively new project, having been begun in 1917. There is a considerable

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.					Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Bureau of Entomology—Continued.</i>						
demand on the part of fruit growers for a thorough investigation of the insects affecting these plants, which have caused serious injury. This project is now supported in part from other appropriations and, if continued, with necessary enlargements, the increase recommended will be required.						
(d) \$3,000 for investigations of insects affecting tropical and other ornamental plants in greenhouses. There is a wide demand for careful investigation of the insects affecting greenhouse plants, which represent so important a part of the florist and ornamental plant interests of the country. This line of work has been practically untouched, such minor studies as have been made having been supported by other appropriations. It is believed that the importance of the subject warrants the small allotment recommended.						
(e) \$4,200 for investigation of tropical and subtropical fruit insects in the Canal Zone. Owing to lack of funds, this project has been conducted under the appropriation for the investigations of the Mediterranean and other fruit flies, since certain flies were a special feature of the work in the Canal Zone. In its development, the project appears to come more properly under the appropriations for tropical and subtropical plant insect investigations. Studies already made emphatically demonstrate the need for continuing and expanding the work. Traffic from all parts of the world passes through the Canal Zone. This region, with a tropical climate and a variety of plant life, is a favorable place for foreign insects to find lodgment and become established. In fact, some very serious pests have already become established and eventually may be brought to citrus-growing regions in the United States. This project will require the services of at least two expert investigators, and, owing to the unusually high cost of living in the Canal Zone, expenses incident to the work will be greater than for similar investigations in the subtropical regions of the United States.						
Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.		
Salaries:		Number.	Number.	Number.		
Entomologist.....per annum..	\$4,500.00	1	1	1		
Entomologist.....do.....	3,000.00	2	2			
Entomologist.....do.....	2,750.00	1	1	1		
Entomologist.....do.....	2,500.00			1		
Entomologist.....do.....	2,400.00	2	2	1		
Specialist.....do.....	2,400.00	1	1			
Specialist.....do.....	1,980.00			1		
Scientific assistant.....do.....	2,220.00	3	3			
Scientific assistant.....do.....	2,100.00			1		
Scientific assistant.....do.....	2,000.00	2	2			
Scientific assistant.....do.....	1,980.00	1		2		
Scientific assistant.....do.....	1,800.00	3		2		
Scientific assistant.....do.....	1,620.00			1		
Scientific assistant.....do.....	1,600.00	1	1	1		
Scientific assistant.....do.....	1,560.00	1	1	1		
Scientific assistant.....do.....	1,440.00	1	1	1		
Scientific assistant.....do.....	1,400.00			1		
Scientific assistant.....do.....	1,200.00	1	1	1		
Laboratory assistant.....do.....	1,320.00			1		
Laboratory assistant.....do.....	1,200.00			1		
Field assistant (temporary).....do.....	1,200.00		1	1		
Clerk.....do.....	1,100.00			1		
Collaborators and inspector, \$600 to \$12.....do.....		8	8	10		
Wages:						
Gardener.....do.....	1,200.00	1	1	1		
		29	26	31		
Salaries.....		\$44,974.00	\$38,794.00	\$30,744.39		
Wages.....		1,200.00	1,200.00	522.50		
OTHER OBJECTS OF EXPENDITURE.						
Stationery.....		300.00	200.00			
Traveling expenses.....		12,000.00	9,000.00	10,763.85		
Equipment and material.....		2,000.00	800.00	881.72		
Telephone and telegraph service.....		500.00	275.00			
Miscellaneous items.....		5,526.00	1,231.00	6,150.24		
Total.....		66,500.00	51,500.00	49,062.70		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Bureau of Entomology—Continued.</i>		
(36) For the investigation [investigations, identification,] and [systematic] classification of miscellaneous insects, [including the study of insects affecting the health of man and domestic animals, household insects, and the importation and exchange of useful insects. \$52 330] and for the study and investigation of insects that carry disease (acts June 16, 1880, vol. 21, p. 259, sec. 1; June 3, 1902, vol. 32, p. 298, sec. 1; Mar. 3, 1905, vol. 33, pp. 1269, 1270, secs. 1-3; June 30, 1906, vol. 34, p. 688, sec. 1; May 31, 1920, vol. 41, pp. 714, 715, sec. 1) -----	\$84, 330. 00	
Appropriation for 1912.....\$19,740	Estimate for 1913.....\$19,740	
Appropriation for 1913.....19,740	Estimate for 1914.....30,000	
Appropriation for 1914.....54,280	Estimate for 1915.....54,280	
Appropriation for 1915.....54,280	Estimate for 1916.....54,280	
Appropriation for 1916.....54,280	Estimate for 1917.....57,980	
Appropriation for 1917.....57,980	Estimate for 1918.....56,380	
Appropriation for 1918.....56,380	Estimate for 1919.....52,330	
Appropriation for 1919.....52,330	Estimate for 1920.....52,330	
Appropriation for 1920.....62,330	Estimate for 1921.....62,330	
Appropriation for 1921.....52,330	Estimate for 1922.....84,330	
NOTE.—There is an increase of \$32,000 in this item, which, if allowed, will be used as follows:		
(a) \$10,000 for the identification and classification of miscellaneous insects. Under this item provision is made for the systematic study, identification, and classification of injurious insects and their parasites. This work is performed by experts of world-wide reputation. Upon their intimate knowledge of the different groups of insects depends to a large extent the accuracy of the remedial investigations of the bureau's field workers. The entomologist whose time is given to economic problems in the field must know exactly what a given crop pest is, what its previous record has been, and what its capacity for damage may be; and this accurate information depends upon the work of the experts employed under this appropriation. The large number of insect problems of economic importance that have developed during recent years has made it necessary to secure additional experts to identify and study the insects that have become important factors in these problems. The Bureau of Entomology, the acknowledged authority on insects, having charge of the national collection of insects (the largest collection of economic insects in the world), is called upon by State institutions to compare and identify thousands of specimens annually. This work is of benefit not only to the various States, but also to the department, since it results in the extension of the bureau's records and often in important additions to the collection. A great part of the time of the bureau specialists is given to the identification of insects from these outside sources; yet complaints of delay are constantly received because the present force is inadequate to report promptly on the specimens submitted. Under the present limited appropriation, the demands for this work can not be properly met. The funds available for this work have not been increased for a number of years; in fact, they were reduced \$10,000 by the last Congress. In consequence, the important control projects, for which large appropriations have been made specifically for remedial work, are seriously hampered.		
(b) \$17,000 for investigations of screw worm and ox warble. The most destructive insect pest of domestic animals in the United States is the screw worm of cattle, the larva of one of the blowflies. It is especially destructive in the Southwest. During the season when the parent flies are prevalent, any fresh cut or wound upon an animal is certain to become infested with the blowfly maggot or screw worm. This insect is largely responsible for the heavy losses usually following dehorning or castration operations. Cows giving birth to calves at this season are also subject to infestation, as any flow of blood makes an attractive place for the flies to lay their eggs. It is conservatively estimated that the average annual loss to the live-stock industry from the ravages of this pest is \$4,000,000. Under the very limited appropriations which have been available for this work in the past, small-scale control measures have been worked out. Owing to lack of sufficient funds it has been impossible to make the large-scale tests which are absolutely necessary to demonstrate the effectiveness of the method used and the resultant elimination of a large part of the present annual loss.		
The "heel fly" or "ox warble" is a widely distributed pest of cattle, occurring over the entire country. The adult fly lays its eggs upon the heel of the animal. The small larva which hatches from the egg bores through the skin just above the heel and works its way under the skin up to the back, where it forms the familiar lumps known as "warbles" or "wolves." It is especially troublesome to dairy cattle, its attacks resulting in weakened vitality and decreased milk secretion. In order to conduct the necessary experiments to develop successful control measures, additional funds are necessary.		
(c) \$5,000 for mosquito investigations. In order to complete the studies already begun on the regional distribution of disease-carrying mosquitoes in respect to topography, agricultural operations, and agri-		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.					Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Bureau of Entomology—Continued.</i>						
cultural development, and to bring the data to a point where definite conclusions can be drawn, additional work will be necessary. The practical value of such data can not be overestimated. At present certain sections of the country are greatly retarded in development by reason of the fear of disease-carrying mosquitoes. Knowledge as to the types of terrain that are free from such pests would largely do away with this uncertainty.						
The language of the paragraph has been amended so as to more clearly indicate the character and purpose of the investigations conducted thereunder.						
Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.		
Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>		
Entomologist.....per annum..	\$3,250.00	2	2	1		
Entomologist.....do.....	3,000.00	1	1	1		
Entomologist.....do.....	2,820.00	3	3	1		
Entomologist.....do.....	2,750.00			1		
Entomologist.....do.....	2,520.00	4	3	1		
Entomologist.....do.....	2,500.00			5		
Entomologist.....do.....	2,400.00	1	1	1		
Scientific assistant.....do.....	2,250.00			2		
Scientific assistant.....do.....	2,220.00			3		
Scientific assistant.....do.....	2,160.00	3	2			
Scientific assistant.....do.....	2,000.00	1		1		
Scientific assistant.....do.....	1,980.00	3	3	2		
Scientific assistant.....do.....	1,800.00	4	1	3		
Scientific assistant.....do.....	1,740.00	1	1	4		
Scientific assistant.....do.....	1,620.00	1	1	1		
Scientific assistant.....do.....	1,500.00			2		
Scientific assistant.....do.....	1,380.00			1		
Scientific assistant.....do.....	1,200.00			1		
Clerk.....do.....	1,980.00			1		
Preparators, laboratory assistant, and collaborators, \$720 to \$1.....do.....		3	3	9		
		26	21	39		
Salaries.....		\$54,456.00	\$40,365.00	\$49,633.07		
OTHER OBJECTS OF EXPENDITURE.						
Traveling expenses.....		12,000.00	4,500.00	5,535.65		
Equipment and material.....		8,750.00	1,100.00	999.26		
Telephone and telegraph service.....		300.00	200.00			
Miscellaneous items.....		8,824.00	6,165.00	5,617.90		
Total.....		\$4,330.00	\$2,330.00	\$1,785.88		
(37) For general administrative expenses connected with above lines of investigation, and for miscellaneous expenses incident thereto (<i>acts June 16, 1880, vol. 21, p. 259, sec. 1; June 3, 1902, vol. 32, p. 298, sec. 1; Mar. 3, 1905, vol. 33, pp. 1269, 1270, secs. 1-3; June 30, 1906, vol. 34, p. 688, sec. 1; May 31, 1920, vol. 41, pp. 714, 715, sec. 1</i>					\$3,880.00	
Appropriation for 1917.....	\$3,000	Estimate for 1918.....	\$3,000			
Appropriation for 1918.....	3,000	Estimate for 1919.....	9,000			
Appropriation for 1919.....	5,480	Estimate for 1920.....	5,480			
Appropriation for 1920.....	5,480	Estimate for 1921.....	3,880			
Appropriation for 1921.....	3,880	Estimate for 1922.....	3,880			
Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.		
Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>		
Assistant.....per annum..	\$3,000.00	1	1	1		
Assistant (part time).....do.....	2,700.00			1		
Clerk (part time).....do.....	1,800.00			1		
Clerk (part time).....do.....	1,600.00			2		
Collaborator.....do.....	12.00	1	1	1		
		2	2	6		
Salaries.....		\$3,012.00	\$3,012.00	\$3,953.67		
OTHER OBJECTS OF EXPENDITURE.						
Stationery.....		100.00	100.00	174.76		
Traveling expenses.....		300.00	300.00	215.96		
Equipment and material.....		200.00	200.00	415.55		
Telephone and telegraph service.....		85.00	85.00	84.54		
Miscellaneous items.....		183.00	183.00	605.19		
Total.....		3,880.00	3,880.00	5,449.67		
In all, for general expenses.....					\$960,170.00	\$740,670.00
Appropriations for 1912.....	\$256,950	Estimates for 1913.....	\$258,450			
Appropriations for 1913.....	328,750	Estimates for 1914.....	371,000			
Appropriations for 1914.....	381,250	Estimates for 1915.....	447,970			
Appropriations for 1915.....	450,370	Estimates for 1916.....	460,370			
Appropriations for 1916.....	459,370	Estimates for 1917.....	446,150			
Appropriations for 1917.....	464,650	Estimates for 1918.....	532,150			
Appropriations for 1918.....	524,250	Estimates for 1919.....	557,300			
Appropriations for 1919.....	567,300	Estimates for 1920.....	603,300			
Appropriations for 1920.....	943,300	Estimates for 1921.....	778,420			
Appropriations for 1921.....	740,670	Estimates for 1922.....	960,170			

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.																																								
<p><i>Preventing Spread of Moths, Bureau of Entomology—</i></p> <p>(38) To enable the Secretary of Agriculture to meet the emergency caused by the continued spread of the gypsy and brown-tail moths by conducting such experiments as may be necessary to determine the best methods of controlling these insects; by introducing and establishing the parasites and natural enemies of these insects and colonizing them within the infested territory; by establishing and maintaining a quarantine against further spread in such manner as is provided by the general nursery-stock law, approved Aug. 20, 1912, as amended, entitled "An act to regulate the importation of nursery stock and other plants and plant products, to enable the Secretary of Agriculture to establish and maintain quarantine districts for plant diseases and insect pests, to permit and regulate the movements of fruits, plants, and vegetables therefrom, and for other purposes," in cooperation with the authorities of the different States concerned and with the several State experiment stations, including rent outside of the District of Columbia, the employment of labor in the city of Washington and elsewhere, and all other necessary expenses, [\$250 000] \$600,000 (<i>acts Mar. 3, 1905, vol. 33, pp. 1269, 1270, secs. 1-3; May 31, 1920, vol. 41, p. 715, sec. 1</i>) -----</p> <table><tr><td>Appropriation for 1912.....</td><td>\$284,840</td><td>Estimate for 1913.....</td><td>\$284,840</td></tr><tr><td>Appropriation for 1913.....</td><td>284,840</td><td>Estimate for 1914.....</td><td>300,000</td></tr><tr><td>Appropriation for 1914.....</td><td>300,000</td><td>Estimate for 1915.....</td><td>297,540</td></tr><tr><td>Appropriation for 1915.....</td><td>310,000</td><td>Estimate for 1916.....</td><td>310,000</td></tr><tr><td>Appropriation for 1916.....</td><td>310,000</td><td>Estimate for 1917.....</td><td>305,000</td></tr><tr><td>Appropriation for 1917.....</td><td>305,050</td><td>Estimate for 1918.....</td><td>305,050</td></tr><tr><td>Appropriation for 1918.....</td><td>305,050</td><td>Estimate for 1919.....</td><td>304,050</td></tr><tr><td>Appropriation for 1919.....</td><td>304,050</td><td>Estimate for 1920.....</td><td>304,050</td></tr><tr><td>Appropriation for 1920.....</td><td>304,050</td><td>Estimate for 1921.....</td><td>302,650</td></tr><tr><td>Appropriation for 1921.....</td><td>250,000</td><td>Estimate for 1922.....</td><td>600,000</td></tr></table> <p>NOTE.—There is an increase in this item of \$350,000. Congress at the last session reduced the appropriation for the control of gypsy and brown-tail moths by approximately \$52,000. If additional funds are not secured to continue the work in New England as outlined by the department, and approved by Congress for the past 10 years, reasonable protection can not be afforded to nearby States from the infestation of the gypsy moth. Owing to particularly favorable conditions for spread, the area infested by the gypsy moth has increased materially during the past few years. Additional funds are needed to enable the department to continue the necessary scouting and clean-up work on the western border of the infested area in New England and to start a campaign for the control of this insect in New Jersey.</p> <p>Unless sufficient funds are available, a rapid spread of the gypsy moth is bound to occur. During the past summer infestations of this insect were found in New York, New Jersey, and Pennsylvania. These infestations were traced back to trees distributed from a large importation of nursery stock shipped to this country in 1910, before the Federal Horticultural Board was created and a Federal quarantine established. Immediate action was taken to thoroughly scout this territory, and, on account of the seriousness of the situation, it was necessary to use a large part of the available funds of the moth appropriation for quarantine purposes to prevent a further spread of the insect in this new territory. The New Jersey infestation proved to be one of long standing and the situation was complicated by a large number of shipments of trees that had been made from the colony site to many destinations outside this area. A record of the shipments was secured, but as a large number of trees were sent to nurseries and landscape architects and redistributed, considerable difficulty has been found in determining the ultimate destination of this stock. The records show that during the past seven years a large number of these trees had been shipped to more than 500 places located in Connecticut, Delaware, Florida, Indiana, Kentucky, Maryland, Massachusetts, New Jersey, New York, Pennsylvania, Ohio, Rhode Island, Virginia, Wisconsin, and the District of Columbia. Small infestations resulting from the shipment of this stock have been found at various points in New Jersey, New York, and Pennsylvania. Trained scouts sent by the department to determine the extent of the infestations in New Jersey found the insect scattered over an area of about 100 square miles. Careful scouting will be necessary this fall to determine the extent and density of the infestation. This should be followed by a very</p>	Appropriation for 1912.....	\$284,840	Estimate for 1913.....	\$284,840	Appropriation for 1913.....	284,840	Estimate for 1914.....	300,000	Appropriation for 1914.....	300,000	Estimate for 1915.....	297,540	Appropriation for 1915.....	310,000	Estimate for 1916.....	310,000	Appropriation for 1916.....	310,000	Estimate for 1917.....	305,000	Appropriation for 1917.....	305,050	Estimate for 1918.....	305,050	Appropriation for 1918.....	305,050	Estimate for 1919.....	304,050	Appropriation for 1919.....	304,050	Estimate for 1920.....	304,050	Appropriation for 1920.....	304,050	Estimate for 1921.....	302,650	Appropriation for 1921.....	250,000	Estimate for 1922.....	600,000	\$600, 000. 00	\$250, 000. 00
Appropriation for 1912.....	\$284,840	Estimate for 1913.....	\$284,840																																							
Appropriation for 1913.....	284,840	Estimate for 1914.....	300,000																																							
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Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation, date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.					Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>Preventing Spread of Moths, Bureau of Entomology—Continued.</i>						
<p>thorough clean-up during the fall and early spring, supplemented by extensive spraying operations next May and June. It is known that several shipments have gone to city parks for replacing missing or dead trees in the park system or along the streets. This will necessitate careful scouting of several cities, particularly Buffalo and Brooklyn, N. Y.</p> <p>It is expected that the State of New Jersey will appropriate \$100,000 and the State of New York \$50,000 to assist in controlling these outbreaks. To confine this insect to the territory infested, it has been found from past experience that careful scouting and clean-up work must be continued for several seasons. During the calendar year 1919 the New England States expended over \$790,000 on gipsy-moth control work, in addition to the \$300,000 expended by the department. From 1890 to 1900 the State of Massachusetts expended \$1,175,100 and had the gipsy moth confined to an area of a little over 200 square miles. At the end of this period no serious infestations were known in the entire area. The work was then dropped and was not resumed until 1905. Serious spread of the pest to other States and very serious damage in New England have been prevented only by constant and costly endeavor, and to lessen the effort at the present time would overthrow the results of many years' work.</p>						
Employees.	Rate.	Esti- mated, 1922.	Appro- priated, 1921.	Ex- pended, 1920.		
Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>		
Entomologist.....per annum..	\$4,380.00	1	1			
Entomologist.....do.....	4,000.00			1		
Scientific assistant.....do.....	3,250.00	1	1	1		
Scientific assistant.....do.....	3,000.00	2	2			
Scientific assistant.....do.....	2,500.00			2		
Scientific assistant.....do.....	2,400.00	1	1			
Scientific assistant.....do.....	2,250.00	1	1	1		
Scientific assistant.....do.....	2,160.00	1	1	2		
Scientific assistant.....do.....	1,980.00	1		1		
Scientific assistant.....do.....	1,920.00	2	2			
Scientific assistant.....do.....	1,800.00	1		2		
Scientific assistant.....do.....	1,740.00	6	6	2		
Scientific assistant.....do.....	1,680.00	1	1			
Scientific assistant.....do.....	1,620.00	1	1			
Scientific assistant.....do.....	1,560.00	3	4	7		
Scientific assistant.....do.....	1,500.00			1		
Scientific assistant.....do.....	1,400.00	4	4	4		
Scientific assistant.....do.....	1,380.00	7	6	7		
Scientific assistant.....do.....	1,200.00			3		
Expert.....do.....	1,980.00			1		
Specialist.....do.....	1,800.00			1		
Specialist.....do.....	1,740.00	1	1	1		
Specialist (temporary).....do.....	1,600.00			1		
Assistant.....do.....	1,560.00			1		
Field assistant (temporary).....do.....	1,320.00			1		
Field assistant.....do.....	1,200.00	24	14	17		
Laboratory assistant.....do.....	1,200.00	1	1			
Preparator.....do.....	1,080.00			1		
Clerk.....do.....	1,400.00			1		
Foremen.....do.....	1,560.00	2	3			
Foremen.....do.....	1,380.00			3		
Foreman.....do.....	1,260.00			1		
Preparator and collaborators, \$720 to \$1.....do.....		5	5	6		
Wages:						
Mechanic.....do.....	1,260.00	1	1	1		
Mechanic.....do.....	1,200.00	1	1	2		
Laborers, scouts, foremen, etc., \$4.96 to \$2.88.....per diem..		500	300	126		
		567	357	200		
Salaries.....		\$98,198.00	\$82,598.00	\$73,095.92		
Wages.....		112,460.00	99,460.00	100,262.93		
OTHER OBJECTS OF EXPENDITURE.						
Stationery.....		1,000.00	500.00			
Traveling expenses.....		85,000.00	30,000.00	45,087.85		
Equipment and material.....		75,000.00	6,000.00	3,518.31		
Miscellaneous items.....		228,342.00	31,442.00	69,171.34		
Total.....		600,000.00	250,000.00	291,136.35		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>Prevention of Spread of European Corn Borer, Bureau of Entomology—</i>		
(39) <i>To enable the Secretary of Agriculture to meet the emergency caused by the spread of the European corn borer, and to provide means for the control and prevention of spread of this insect throughout the United States, in cooperation with the States concerned, including employment of persons and means in the city of Washington and elsewhere, and all other necessary expenses, \$400,000, of which \$250,000 shall be immediately available (submitted)</i> -----	\$400,000. 00	
NOTE.—While this appears as a new item under the Bureau of Entomology, it is merely a transfer, without change in amount or language, from the miscellaneous section of the agricultural appropriation act for 1921.		
The European corn borer was discovered in eastern Massachusetts in 1917 and has since been found in two widely separated areas in New York State. During the early fall of 1920 an extensive area of infestation was discovered in southern Ontario, Canada. This infestation occurred in a field-corn growing section, and inspections made by experts of the department have demonstrated beyond the possibility of doubt that the insect must be considered as a pest of prime importance to the corn-growing industry of the United States.		
During the fiscal year 1920 a special emergency appropriation of \$250,000 was granted by Congress for the control of this insect under which much effective work was done, but rapidly increasing and widely distributed new areas of infestation were discovered, calling for a much larger appropriation for the control or repression of this serious pest. An appropriation of \$400,000 was made for this purpose during the current fiscal year, \$250,000 of which was made available on May 31, 1920. Under this fund the department has been conducting an intensive scouting and control campaign throughout the entire region of infestation in the United States. The work has been especially active in the heavily infested area in the vicinity of Boston, where a great deal of the corn and other vegetables consumed throughout New England are produced. In this section it has been necessary to maintain a strict and constant quarantine of corn and other produce in order to prevent the distribution of the pest to the corn-belt States through commercial channels. No corn on the cob, corn stalks, or other dangerous merchandise has been permitted to move into uninfested territory from any of the infested areas, thus removing the greatest danger of rapid spread of the pest to more or less remote regions where corn is the principal crop grown. It has been necessary to employ a large force of inspectors and scouts throughout many of the corn-growing States as well as in the infested areas.		
In addition to these activities, experimental control work of wide scope and importance has been carried on in order to ascertain the best means of controlling the pest. This work includes the establishment in Europe of a competent expert who is engaged in collecting the natural enemies of the insect for introduction in this country. One consignment of parasites already has been received and liberated in eastern Massachusetts, and large shipments of such enemies are expected to arrive during the winter months.		
Approximately \$350,000 will be required to continue the present quarantine regulations, but these must be supplemented by efforts to reduce the intensity of infestation in the most heavily infested areas in order to retard natural spread, by flight, etc., as far as possible, and also by the vigorous prosecution of the work of introducing the natural enemies of the pest from Europe and perhaps from Asia. The research activities in this country also must be amply provided for, since upon them depend the failure or success of the efforts at natural and artificial control which are still considered of vital importance to the problem.		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.					Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>Prevention of Spread of European Corn Borer, Bureau of Entomology—Con.</i>						
Employees.	Rate.	Esti- mated, 1922.	Appro- priated, 1921.	Ex- pended, 1920.		
Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>		
Entomologist.....per annum.....	\$4,000.00	1	1			
Entomologist (part time).....do.....	3,750.00			1		
Entomologist.....do.....	3,600.00			1		
Entomologist.....do.....	3,420.00	1	1			
Entomologist (part time).....do.....	2,500.00			1		
Scientific assistant.....do.....	2,200.00	3	1	1		
Scientific assistant.....do.....	2,040.00	2	2	1		
Scientific assistant.....do.....	1,920.00	1	1			
Scientific assistant.....do.....	1,800.00	7	3	6		
Scientific assistant.....do.....	1,740.00	1	1	1		
Scientific assistant.....do.....	1,600.00	5	1	1		
Scientific assistant.....do.....	1,560.00	1	1			
Scientific assistant.....do.....	1,400.00	2	2	7		
Scientific assistant.....do.....	1,300.00	16	8			
Scientific assistant.....do.....	1,200.00	2	2	2		
Field assistant.....do.....	1,500.00		1			
Field assistant.....do.....	1,380.00	1	1	10		
Field assistant.....do.....	1,200.00			8		
Field assistant.....do.....	1,080.00			1		
Laboratory assistant.....do.....	1,400.00	2				
Laboratory assistant.....do.....	1,320.00	1	1	1		
Laboratory assistant (temporary).....do.....	1,200.00		1			
Clerk.....do.....	2,500.00	1	1	1		
Clerk.....do.....	1,800.00			1		
Clerk.....do.....	1,600.00	2	2	2		
Clerk.....do.....	1,400.00	5	3	3		
Clerk.....do.....	1,200.00	1	1	2		
Field assistant and collaborators, \$900 to \$12.....do.....		12	12	9		
Wages:						
Foreman, scouts, and laborers, \$5.50 to \$2.....per diem.....		175	150	101		
		242	197	161		
Salaries.....		\$90,744.00	\$58,804.00	\$40,872.84		
Wages.....		100,000.00	100,000.00	94,152.07		
OTHER OBJECTS OF EXPENDITURE.						
Traveling expenses.....		160,000.00	30,000.00	26,473.35		
Equipment and material.....		30,000.00	75,000.00	59,584.46		
Telephone and telegraph service.....		800.00	750.00			
Miscellaneous items.....		18,456.00	135,446.00	28,524.81		
Total.....		400,000.00	400,000.00	249,607.53		
<i>Statement of clerks employed in District of Columbia under lump-fund appropriations for 30 days or more during the fiscal year ended June 30, 1920 (32 Stat., p. 303).</i>						
GENERAL EXPENSES—BUREAU OF ENTOMOLOGY.						
3 clerks, at \$1,800 each per annum.						
3 clerks, at \$1,600 each per annum.						
1 clerk, \$1,500 per annum.						
1 clerk, \$1,400 per annum.						
2 clerks, at \$1,200 each per annum.						
1 clerk, \$1,100 per annum.						
1 clerk, \$1,080 per annum.						
2 clerks, at \$900 each per annum.						
Total for Bureau of Entomology.....					\$2,096,420.00	\$1,123,460.00

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
BUREAU OF BIOLOGICAL SURVEY.		
<i>Salaries, Bureau of Biological Survey</i>		
(1) One biologist, who shall be chief of bureau (increase of \$2,000) (<i>R. S., p. 87, secs. 520-523; acts Mar. 3, 1905, vol. 33, p. 877, sec. 1; May 31, 1920, vol. 41, p. 715, sec. 1</i>) -----	\$6,000.00	
NOTE.—An increase of \$2,000 in the salary of the chief of bureau is recommended. See note under item 1, p. 19.		
(2) One chief clerk [and executive assistant] (increase of \$200, with change of title) (<i>same acts</i>) -----	2,000.00	
NOTE.—There has been no change in the salary of chief clerk of this bureau since July 1, 1911. The increase recommended will provide a more equitable compensation in keeping with the responsibilities of the position and with the salaries paid similar officers in other bureaus of the department.		
The words "and executive assistant" are superfluous, and the change proposed will make the title conform with the designations of similar officers in other bureaus of the department.		
(3) One administrative assistant (<i>same acts</i>) -----	2,250.00	
(4) One executive assistant (<i>same acts</i>) -----	1,800.00	
(5) One clerk (<i>submitted</i>) -----	2,000.00	
NOTE.—This new place, together with those in items 7 and 8, will provide promotions for a number of deserving employees in the accounting section of the bureau and make possible the appointment of three new employees in the lower grades, whose services will be required if the increased activities recommended under the various lump-fund items of the Bureau of Biological Survey are approved.		
It is proposed to promote to the \$2,000 place an employee who has been an auditor in the department for 30 years. This is a very responsible position and the present incumbent has rendered faithful and efficient service. The \$1,800 place is intended for the head bookkeeper, who performs high-class work and is deserving of a larger salary. A number of other promotions in the lower grades will be possible if these new places are provided.		
(6) One executive clerk (by transfer from lump fund, with change of title) (<i>R. S., p. 87, secs. 520-523; acts Mar. 3, 1905, vol. 33, p. 877, sec. 1; May 31, 1920, vol. 41, p. 715, sec. 1</i>) -----	1,980.00	
(7) Four clerks, class 4 (increase of 2, 1 by transfer from lump fund, and 1 new place) (<i>same acts</i>) -----	7,200.00	
NOTE.—See note under item 5.		
(8) Seven clerks, class 3 (increase of 3, 2 by transfer from lump fund, and 1 new place) (<i>same acts</i>) -----	11,200.00	
NOTE.—See note under item 5.		
(9) One clerk (<i>same acts</i>) -----	1,500.00	
(10) Sixteen clerks, class 2 (increase of 7, 5 by transfer from lump fund, and 2 new places) (<i>same acts</i>) -----	22,400.00	
NOTE.—There is need for an additional clerk in the property section of the bureau and one in connection with the enforcement of the laws protecting land fur-bearing animals in Alaska. The latter work has recently been transferred to this department from the Department of Commerce.		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>Salaries, Bureau of Biological Survey—Continued.</i>		
(11) One clerk (<i>R. S. p. 87, secs. 520-523; acts Mar. 3, 1905, vol. 33, p. 877, sec. 1; May 31, 1920, vol. 41, p. 715, sec. 1</i>) . . .	\$1,260.00	
(12) Seventeen clerks, class 1 (increase of 3, 1 by transfer from lump fund, and 2 new places) (<i>same acts</i>)	20,400.00	
NOTE.—These new places are submitted in lieu of 2 clerks at \$900 each (item 16). It has been found impossible to retain the services of competent clerks at \$900, the latter places being vacant a large part of the time.		
(13) Two clerks, at \$1,100 each (<i>same acts</i>)	2,200.00	
(14) One clerk (<i>same acts</i>)	1,080.00	
(15) Three clerks, at \$1,000 each (<i>same acts</i>)	3,000.00	
(16) Two clerks, at \$900 each.		
NOTE.—See note under item 12.		
(17) One preparator (increase of \$200) (<i>same acts</i>)	1,400.00	
NOTE.—This position requires technical training and experience in high-class taxidermy. The present occupant is very much underpaid and deserves the small increase recommended. It would be impossible to secure a capable man at \$1,200 in the event that this position became vacant.		
(18) One preparator (<i>same acts</i>)	900.00	
(19) One messenger (increase of \$180) (<i>same acts</i>)	900.00	
NOTE.—This increase is recommended in order to provide a wage which will more nearly meet present living conditions and place the compensation of this employee on a par with that paid to other employees performing similar duties.		
(20) One photographer (increase of \$200) (<i>same acts</i>)	1,500.00	
NOTE.—The salary paid this photographer is considerably lower than that received for like services in other branches of the department. He has been connected with the Bureau of Biological Survey for 17 years, receiving his last promotion on July 1, 1911. His services are very satisfactory, and the small promotion requested is well deserved.		
(21) One game warden (increase of \$200) (<i>same acts</i>)	1,400.00	
NOTE.—This employee has, since Sept. 1, 1909, been in continuous charge of the National Bison Range in Montana, one of the largest big-game reservations in the country, without increase in salary during that period. Other game wardens, with no greater responsibility, are paid \$1,400 or more.		
(22) One messenger boy (<i>submitted</i>)	600.00	
NOTE.—This new place is submitted in lieu of 1 messenger boy at \$480 (item 23), in order to provide for the promotion of a messenger boy in the latter grade. Messenger boys after satisfactory training receive more than \$480 in outside employment and will not remain in the Government service unless there is opportunity for promotion.		
(23) One messenger boy (decrease of 1) (<i>R. S., p. 87, secs. 520-523; acts Mar. 3, 1905, vol. 33, p. 877, sec. 1; May 31, 1920, vol. 41, p. 715, sec. 1</i>)	480.00	
NOTE.—See note under item 22.		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
Salaries, Bureau of Biological Survey—Continued.		
(24) One laborer (increase of \$300) (<i>R. S. p. 87, secs. 520-523; acts Mar. 3, 1905, vol 33, p. 877, sec. 1; May 31, 1920, vol. 41, p. 715, sec. 1</i>) -----	\$900. 00	
NOTE.—The increase proposed in this item will provide a more adequate salary for a faithful and efficient employee now receiving \$600, who has been in the service for 6 years without salary increase.		
(25) Two charwomen, at \$240 each (<i>same acts</i>) -----	480. 00	
	\$94, 830. 00	\$67, 450. 00
Appropriations for 1912..... \$24,000	Estimates for 1913..... \$25,100	
Appropriations for 1913..... 25,100	Estimates for 1914..... 30,040	
Appropriations for 1914..... 29,990	Estimates for 1915..... 31,590	
Appropriations for 1915..... 32,790	Estimates for 1916..... 34,470	
Appropriations for 1916..... 34,470	Estimates for 1917..... 44,030	
Appropriations for 1917..... 44,030	Estimates for 1918..... 47,770	
Appropriations for 1918..... 46,370	Estimates for 1919..... 48,260	
Appropriations for 1919..... 48,170	Estimates for 1920..... 55,470	
Appropriations for 1920..... 55,970	Estimates for 1921..... 68,870	
Appropriations for 1921..... 67,450	Estimates for 1922..... 94,830	
NOTE.—Apparent increase, \$27,380; actual increase, \$12,200, as follows:		
Promotions.		
1 chief of bureau, from \$4,000 to \$6,000.....	\$2, 000	
1 chief clerk and executive assistant, \$1,800, to one chief clerk, \$2,000.....	200	
1 preparator, from \$1,200 to \$1,400.....	200	
1 messenger, from \$720 to \$900.....	180	
1 photographer, from \$1,300 to \$1,500.....	200	
1 game warden, from \$1,200 to \$1,400.....	200	
1 laborer, from \$600 to \$900.....	300	
	\$3, 280	
New places.		
1 clerk.....	2, 000	
1 clerk, class 4.....	1, 800	
1 clerk, class 3.....	1, 600	
2 clerks, class 2.....	2, 800	
2 clerks, class 1.....	2, 400	
1 messenger boy.....	600	
	11, 200	
	14, 480	
Places dropped.		
2 clerks, at \$900 each.....	1, 800	
1 messenger boy.....	480	
	2, 280	
Actual increase.....	\$12, 200	
Transfers from lump funds, which funds have been correspondingly reduced.		
1 executive clerk.....	1, 980	
1 clerk, class 4.....	1, 800	
2 clerks, class 3.....	3, 200	
5 clerks, class 2.....	7, 000	
1 clerk, class 1.....	1, 200	
	15, 180	
Apparent increase.....	27, 380	
Change of title.		
1 chief clerk and executive assistant, \$1,800, changed to 1 chief clerk, \$2,000.		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Bureau of Biological Survey—</i>		
(26) For salaries and employment of labor in the city of Washington and elsewhere, furniture, supplies, <i>including the purchase of bags, tags, and labels printed in the course of manufacture</i> , traveling, and all other expenses necessary in conducting investigations and carrying out the work of the bureau, as follows (<i>acts May 25, 1900, vol. 31, p. 187, sec. 1; Mar. 4, 1909, vol. 35, pp. 1104, 1137, and 1138, sec. 1; Mar. 4, 1913, vol. 37, pp. 847, 848, sec. 1; May 31, 1920, vol. 41, pp. 715-717, sec. 1</i>): NOTE.—The language of this paragraph has been amended by inserting clause authorizing the purchase of bags, tags, and labels printed in the course of manufacture. Occasional orders are placed for supplies to be manufactured upon which a few words of printing are to appear. Ordinarily only a slight additional charge, if any, is made for the printing, and the supplies are usually shipped direct from the factory to the field station where they are required. Under present laws, all printing, unless otherwise specifically provided for, must be done at the Government Printing Office. This change in language is recommended in order to obviate the necessity for having printing of this character done at the Government Printing Office, which will not only save delay but reduce the expense of such work. Attention is called to the fact that similar authority has been carried for a number of years in the legislative, executive, and judicial appropriation acts covering like supplies for the Treasury Department and that the agricultural appropriation act for the current fiscal year makes similar provision under the meat inspection item.		
(27) For the maintenance of the Montana National Bison range and other reservations and for the maintenance of game introduced into suitable localities on public lands, under supervision of the Biological Survey, including construction of fencing, wardens' quarters, shelters for animals, landings, roads, trails, bridges, ditches, telephone lines, rockwork, bulkheads, and other improvements necessary for the economical administration and protection of the reservations, and for the enforcement of section 84 of the act approved Mar. 4, 1909, entitled "An act to codify, revise, and amend the penal laws of the United States," [\$39,735] \$45,035, of which sum \$2,500 may be used for the purchase, capture, and transportation of game for national reservations (<i>same acts</i>) -----	\$45,035.00	
Appropriation for 1912..... \$14,500 Appropriation for 1913..... 17,000 Appropriation for 1914..... 21,000 Appropriation for 1915..... 16,000 Appropriation for 1916..... 21,000 Appropriation for 1917..... 25,000 Appropriation for 1918..... 35,000 Appropriation for 1919..... 35,000 Appropriation for 1920..... 34,600 Appropriation for 1921..... 39,735	Estimate for 1913..... \$17,000 Estimate for 1914..... 25,000 Estimate for 1915..... 21,000 Estimate for 1916..... 16,000 Estimate for 1917..... 21,000 Estimate for 1918..... 40,000 Estimate for 1919..... 35,000 Estimate for 1920..... 33,800 Estimate for 1921..... 39,735 Estimate for 1922..... 45,035	
NOTE.—There is an increase in this item of \$5,300. The present appropriation for the maintenance of 75 bird and big-game reservations scattered over the United States, Alaska, and the Hawaiian islands is entirely inadequate to protect and maintain these reservations, especially in view of the large increased costs of materials and labor. The small increase recommended will provide (a) \$4,500 for the upkeep and maintenance of the winter elk refuge in Wyoming, the National Bison Ranges in Montana, the Wind Cave national game preserve in South Dakota, and the Niobrara game preserve in Nebraska, and for the increased cost of warden service and materials for the larger bird reservations throughout the country; and (b) \$800 for a more adequate warden service on the Aleutian Islands' reservation, which comprises over 1,200 islands, several hundred miles in extent, with limited means of transportation.		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
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General Expenses, Bureau of Biological Survey—Continued.

Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.
Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>
Assistant in charge.....per annum.....	\$3,600.00	1	1	
Assistant biologist.....do.....	3,000.00			1
Assistant.....do.....	2,800.00		1	
Assistant.....do.....	2,500.00			1
Inspector.....do.....	2,500.00			1
Inspector.....do.....	2,100.00	2	2	
Inspector.....do.....	1,800.00	1	1	1
Inspector.....do.....	1,500.00			1
Agent.....do.....	1,500.00	1	1	1
Warden.....do.....	1,800.00	1	1	
Warden.....do.....	1,400.00	2	2	2
Warden.....do.....	1,000.00	1	1	1
Agents, wardens, and assistant wardens, \$960 to \$1.....do.....		19	16	20
Wages:				
Miscellaneous temporary labor, \$160 per month; \$7 to \$4.....per diem.....		65	65	45
		94	82	75
Salaries.....		\$22,110.00	\$20,175.00	\$15,984.46
Wages.....		8,300.00	6,300.00	8,605.62
OTHER OBJECTS OF EXPENDITURE.				
Traveling expenses.....		4,250.00	3,250.00	2,886.49
Equipment and material.....		7,125.00	6,625.00	9,584.63
Miscellaneous items.....		3,250.00	3,385.00	4,942.68
Construction work.....				¹ 1,480.00
Total.....		45,035.00	39,735.00	43,483.88

¹ This construction work consisted of the following building:
1 frame house containing 6,840 cubic feet at about 21½ cents per cubic foot \$1,480...

- (28) For the improvement and maintenance of the game preserve in Sullys Hill National Park, in the State of North Dakota, including the construction of all fences, sheds, buildings, corrals, roads, shelters, and other structures which may be necessary for the protection of game or for the use of visitors, in addition to the amount heretofore appropriated. \$5,000, the same to be available until expended (*acts May 25, 1900, vol. 31, p. 187, sec. 1; Mar. 4, 1909, vol. 35, pp. 1104, 1137, and 1138, sec. 1; Mar. 4, 1913, vol. 37, pp. 847, 848, sec. 1; May 31, 1920, vol. 41, pp. 715-717, sec. 1*) --- \$5,000.00

Appropriation for 1915.....	\$5,000	Estimate for 1916.....	
Appropriation for 1916.....	5,000	Estimate for 1917.....	
Appropriation for 1917.....	5,000	Estimate for 1918.....	\$5,000
Appropriation for 1918.....	5,000	Estimate for 1919.....	
Appropriation for 1919.....		Estimate for 1920.....	
Appropriation for 1920.....	5,000	Estimate for 1921.....	5,000
Appropriation for 1921.....	5,000	Estimate for 1922.....	5,000

Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.
Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>
Inspector (part time).....per annum.....	\$2,100.00	1	1	
Inspector (part time).....do.....	1,800.00			1
Warden.....do.....	1,400.00	1	1	1
Wages:				
Miscellaneous temporary labor—\$7 to \$4.....per diem.....		15	15	13
		17	17	15
Salaries.....		\$1,925.00	\$1,925.00	\$455.56
Wages.....		1,775.00	800.00	2,054.61
OTHER OBJECTS OF EXPENDITURE.				
Traveling expenses.....		300.00	300.00	215.02
Equipment and material.....		400.00		1,754.61
Miscellaneous items.....		300.00	225.00	1,442.98
Construction work.....		1,300.00	² 1,750.00	
Total.....		5,600.00	5,000.00	5,922.78

¹ This construction work will consist of the following building:
1 pavilion, containing 2,500 cubic feet, at about 12 cents per cubic foot. \$300.00

² This construction work is to consist of the following building:
1 women's rest house, containing 10,752 cubic feet, at about 16½ cents per cubic foot..... 1,750.00

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Bureau of Biological Survey—Continued.</i>		
(29) For investigating the food habits of North American birds and other animals in relation to agriculture, horticulture, and forestry; for investigations, experiments, and demonstrations in connection with rearing fur-bearing animals; for experiments, demonstrations, and cooperation in destroying wolves, coyotes, prairie dogs, gophers, ground squirrels, and other animals injurious to agriculture, horticulture, forestry, animal husbandry, and wild game; and for the protection of stock and other domestic animals through the suppression of rabies in predatory wild animals [\$456,040] (<i>acts May 25, 1900, vol. 31, p. 187, sec. 1; Mar. 4, 1909, vol. 35, pp. 1104, 1137, and 1138, sec. 1; Mar. 4, 1913, vol. 37, pp. 847, 848, sec. 1; May 31, 1920, vol. 41, pp. 715-717, sec. 1</i>).-----	\$600, 000. 00	
Appropriation for 1912..... \$35,000	Estimate for 1913..... \$39,000	
Appropriation for 1913..... 43,000	Estimate for 1914..... 65,000	
Appropriation for 1914..... 60,000	Estimate for 1915..... 60,000	
Appropriation for 1915..... 110,000	Estimate for 1916..... 110,000	
Appropriation for 1916..... 280,000	Estimate for 1917..... 275,540	
Appropriation for 1917..... 400,540	Estimate for 1918..... 400,540	
Appropriation for 1918..... 395,540	Estimate for 1919..... 394,820	
Appropriation for 1919..... 394,820	Estimate for 1920..... 389,440	
Appropriation for 1920..... 464,440	Estimate for 1921..... 575,000	
Appropriation for 1921..... 456,040	Estimate for 1922..... 600,000	
<p>NOTE.—There is an apparent increase in this item of \$143,960, but taking into consideration the transfer of employees to the statutory roll, with salaries aggregating \$8,800, the actual increase is \$152,760, which will be needed for the following purposes:</p> <p>(a) \$8,020 for extension of field investigations of birds. More definite information is needed regarding the beneficial and harmful habits of birds, especially for use in formulating regulations and promulgating orders for the proper control of species which damage fruits and agricultural crops during certain seasons of the year or within restricted areas. For this purpose the services of several additional trained assistants will be required during the crop-growing season. Much of the information secured by these investigations is used by other divisions of the bureau concerned with the protection of bird life.</p> <p>(b) \$2,375 for extension of fur-farming investigations. Additional equipment is needed at the department's experimental fur farm. Several species of fur-bearing animals are being studied and experiments conducted to learn the best methods of feeding and handling them in confinement and to ascertain the causes of, and determine remedial measures for, diseases to which such animals are subject. The rearing of fur-bearing animals in confinement has become an established industry, but many problems require solution in order to meet the vital needs of this growing industry.</p> <p>(c) \$4,200 for investigation of new poisons and poisoning methods in connection with rodent and predatory animal eradication. The marked success already attained in clearing large areas of agricultural and grazing lands of such animals is due mainly to the development by the department of improved methods of eradication and their organized application. Upon the results of these experiments depends to a large degree the successful prosecution of eradication work. New problems are constantly arising due to changes in cropping and live stock practices, with attendant changes in the abundance and destructiveness of these animals.</p> <p>(d) \$10,000 for extending investigations of the life habits, including food habits, of injurious animals, so as to more adequately meet the steadily increasing demands from agricultural and live stock interests in various sections of the country for information looking to the protection of field and orchard crops, grazing lands, and live stock from the depredations of certain species. Much valuable information has already been obtained and used in developing means for the destruction of injurious animals, but many additional problems require solution.</p> <p>(e) \$78,165 for destroying injurious rodents on Federal lands. Native rodent pests occurring in great numbers in all States west of the Mississippi River destroy each year crops and forage having a value estimated at \$300,000,000. The campaigns to destroy rodent pests in organized units have proved so successful and of such distinct value in increasing crop and range grass production that there is insistent demand that the Government clear its lands of these pests in concerted effort with cooperating State and private agencies. The Bureau of Biological Survey with its present limited funds is unable to do its proper share of the cooperative work. During the past year the bureau gave original treatment to 862,455 acres and follow-up treatment to 503,042 acres of Federal land, while cooperating State, county, and private organizations gave original treat-</p>		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
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General Expenses, Bureau of Biological Survey—Continued.

ment to 18,360,538 acres and follow-up treatment to 14,672,032 acres. Co-operators have furnished \$841,909 for this purpose, and 132,333 farmers and stockmen have taken active part in clearing their lands and have contributed much labor free to distribute poisoned grain on Federal land adjacent to their holdings. 1,610 tons of poisoned grain were used, resulting in a saving of crops and forage estimated at \$10,000,000. The work on Federal lands, in addition to protecting adjacent landowners from depredations by animals coming from Federal lands and making possible complete clearing of great units of Federal, State, and private lands, will greatly increase forage production on such Federal lands. This will afford feed for larger numbers of animals and make possible increased Government revenue from permits covering the use of such lands.

(f) \$50,000 for the destruction of predatory animals. Predatory animals kill live stock valued at more than \$20,000,000 each year. The increase recommended for this project will be used in employing additional hunters, purchasing equipment and supplies, and organizing cooperative poisoning campaigns. Due to the proved value of this work, the cooperation of States and stockmen's associations is rapidly increasing. During the past year State legislatures, county officials, and stockmen's associations have contributed \$272,507 to the campaign led and supervised by the Bureau of Biological Survey, in which 523 wolves, 21,558 coyotes, 189 mountain lions, 2,987 bobcats, 10 Canada lynxes, and 94 bears, or a total of 25,361 animals, were trapped or shot; in addition to an estimated equal number of coyotes destroyed in the poison campaigns. This work resulted last year in a saving of live stock estimated in value at \$6,000,000. Skins sold during this period yielded \$42,048, making a total revenue derived by the Government from this source in excess of \$240,000 since the organization of this work in 1915. Excellent progress has been made in clearing Federal lands of these pests, but it is of the utmost importance that provision be made to intensify and extend the operations on Federal lands in order that they may be used to the greatest advantage and to their utmost capacity in raising live stock, and thereby increasing the meat, hide, and wool supply of the nation and the revenue that may be derived by the Government from grazing permits. The additional funds requested are needed to extend operations in Arizona, Arkansas, California, Colorado, Idaho, Montana, Nebraska, Nevada, New Mexico, North and South Dakota, Oklahoma, Oregon, Texas, Utah, Washington, and Wyoming.

Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.
Salaries:		Number.	Number.	Number.
Assistant in charge.....per annum.....	\$3,840.00	1	1	
Assistant in charge.....do.....	3,500.00			1
Scientific assistant.....do.....	3,000.00	1	1	
Scientific assistant.....do.....	2,520.00			1
Scientific assistant.....do.....	2,220.00			1
Scientific assistant.....do.....	1,620.00	1	1	
Scientific assistant.....do.....	1,400.00	1	1	2
Chief field naturalist.....do.....	3,250.00		1	
Assistant.....do.....	2,400.00		2	1
Warden and inspector.....do.....	2,500.00			1
Assistant biologist.....do.....	3,000.00	4	4	
Assistant biologist.....do.....	2,760.00	1		
Assistant biologist.....do.....	2,750.00			2
Assistant biologist.....do.....	2,580.00			1
Assistant biologist.....do.....	2,500.00	1		
Assistant biologist.....do.....	2,400.00	1	1	
Assistant biologist.....do.....	2,250.00	1	1	
Assistant biologist.....do.....	2,200.00			1
Assistant biologist.....do.....	2,100.00			1
Assistant biologist.....do.....	2,040.00	2	2	
Assistant biologist.....do.....	2,000.00			1
Assistant biologist.....do.....	1,800.00	4	4	4
Assistant biologist.....do.....	1,740.00			1
Assistant biologist.....do.....	1,600.00			1
Assistant biologist.....do.....	1,500.00	1	1	1
Assistant biologist.....do.....	1,380.00			1
Assistant.....do.....	2,400.00	3	3	
Assistant.....do.....	2,160.00	3	3	2
Assistant.....do.....	2,100.00			1
Assistant.....do.....	2,040.00	3	2	
Assistant.....do.....	1,920.00	1	1	
Assistant.....do.....	1,860.00			7
Assistant.....do.....	1,800.00	2	2	4
Assistant.....do.....	1,620.00	1	1	1
Assistant.....do.....	1,560.00	2	2	1
Assistant.....do.....	1,500.00	15	15	12
Assistant.....do.....	1,400.00	2	2	4
Assistant.....do.....	1,200.00			9
Scientific indexer.....do.....	1,600.00	1	1	
Scientific indexer.....do.....	1,400.00			1
Preparator.....do.....	1,200.00	1	1	1
Preparator.....do.....	900.00			1
Inspector.....do.....	2,400.00	3	3	
Inspector.....do.....	2,280.00	2	2	

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.					Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Bureau of Biological Survey—Continued.</i>						
Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.		
Salaries—Continued.		Number.	Number.	Number.		
Inspector..... per annum..	\$2,160.00			4		
Inspector.....do.....	2,100.00	1	1	1		
Inspector.....do.....	2,040.00	2	2			
Inspector.....do.....	1,980.00			1		
Inspector.....do.....	1,920.00			1		
Inspector.....do.....	1,800.00	4	4	2		
Inspector.....do.....	1,740.00	1	1	1		
Inspector.....do.....	1,620.00	1	1	1		
Inspector.....do.....	1,500.00	10	10	7		
Inspector.....do.....	1,380.00	1	1	1		
Inspector.....do.....	1,200.00			1		
Field assistant, temporary—						
\$1,500 to \$1,000.....do.....		3	4	12		
Clerk, temporary—						
\$2,000 to \$1,200.....do.....		2	8	16		
Wages:						
Miscellaneous temporary labor—						
\$150 to \$75.....per month..		800	700	687		
		884	792	798		
Salaries.....		\$170,000.00	\$160,500.00	\$117,358.33		
Wages.....		250,000.00	190,000.00	221,119.98		
OTHER OBJECTS OF EXPENDITURE.						
Stationery.....		3,500.00	2,000.00			
Traveling expenses.....		\$5,000.00	60,000.00	57,619.60		
Equipment and material.....		10,000.00	5,000.00	5,608.69		
Telephone and telegraph service.....		1,500.00	890.00			
Miscellaneous items.....		80,000.00	37,740.00	74,931.15		
Total.....		600,060.00	456,040.00	476,637.75		

- (30) For biological investigations, including the relations, habits, geographic distribution, and migrations of animals and plants, and the preparation of maps of the life zones **[\$24,400]** (*acts May 25, 1900, vol. 31, p. 187, sec. 1; Mar. 4, 1909, vol. 35, pp. 1104, 1137, and 1138, sec. 1; Mar. 4, 1913, vol. 37, pp. 847, 848, sec. 1; May 31, 1920, vol. 41, pp. 715-717, sec. 1*) \$39,400.00

Appropriation for 1912.....	\$20,000	Estimate for 1913.....	\$20,000
Appropriation for 1913.....	20,000	Estimate for 1914.....	25,000
Appropriation for 1914.....	25,000	Estimate for 1915.....	21,500
Appropriation for 1915.....	23,500	Estimate for 1916.....	26,500
Appropriation for 1916.....	26,500	Estimate for 1917.....	26,500
Appropriation for 1917.....	26,500	Estimate for 1918.....	30,600
Appropriation for 1918.....	25,600	Estimate for 1919.....	25,600
Appropriation for 1919.....	25,600	Estimate for 1920.....	24,400
Appropriation for 1920.....	24,400	Estimate for 1921.....	24,400
Appropriation for 1921.....	24,400	Estimate for 1922.....	39,400

NOTE.—There is an increase of \$15,000 in this item, which it is proposed to use as follows:

(a) \$5,000 for the investigation and protection of game animals. Some species of game animals have been completely exterminated and others are rapidly decreasing in numbers over extensive areas of the public domain, due mainly to unrestricted hunting and inadequate protection. The national forests and parks in many instances afford ideal conditions for the increase of game animals on areas unsuited for grazing domestic stock. A thorough study of the life habits and distribution of the various species of game animals, together with their relation to other species, including predatory animals, is essential before intelligent action can be undertaken to protect them or provide for their increase. Prompt action is necessary in connection with certain species which have been greatly reduced in numbers and others now becoming almost extinct.

(b) \$10,000 for biological surveys of States and Territories. This work has been very much hindered and curtailed because of war conditions and the greatly increased cost of traveling and of labor. Work is well advanced in several States, but additional funds are needed to complete these surveys and also to continue work in other States where partial surveys have been made. These surveys provide most valuable information in connection with the habits and distribution of mammals and birds, which is of material aid to other divisions of the bureau. It is also in demand by State organizations and other workers along biological lines from whom requests for information are frequently received, much of which can not be supplied until further investigations have been made.

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
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General Expenses, Bureau of Biological Survey—Continued.

The increase recommended will provide for the appointment of an experienced field naturalist, with two assistants, and for the traveling and other expenses of the new employees and of other experts of the bureau engaged in this work, but who are now unable to perform the necessary field work on account of lack of funds to meet their expenses.

Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.
Salaries:		Number.	Number.	Number.
Chief field naturalist.....per annum..	\$3,250.00	1		
Chief field naturalist.....do.....	3,000.00			1
Assistant biologist.....do.....	3,600.00	1	1	
Assistant biologist.....do.....	3,000.00			1
Assistant biologist.....do.....	2,520.00	5	3	
Assistant biologist.....do.....	2,400.00	2	2	3
Assistant biologist.....do.....	2,200.00			1
Assistant biologist.....do.....	2,160.00			1
Assistant biologist.....do.....	1,600.00		1	1
Field assistant.....do.....	1,500.00	1	1	1
Field assistant (temporary).....do.....	1,200.00			2
Preparator.....do.....	1,500.00	1	1	
Preparator (temporary).....do.....	1,400.00			1
Messengers, student assistants, and collaborators— \$480 to \$12.....do.....		2	2	2
		13	11	14
Salaries.....		\$26,530.00	\$16,000.00	\$16,966.60
OTHER OBJECTS OF EXPENDITURE.				
Traveling expenses.....		9,000.00	6,000.00	4,347.00
Equipment and material.....		1,000.00	700.00	483.62
Miscellaneous items.....		2,570.00	1,700.00	2,231.20
Total.....		33,400.00	24,400.00	24,034.42

- (31) For all necessary expenses for enforcing the provisions of the migratory-bird treaty act of July 3, 1918 (Fortieth Statutes at Large, page 755), and for cooperation with local authorities in the protection of migratory birds, and for necessary investigations connected therewith [\$142,500], \$200,000: *Provided*, That of this sum not more than \$20,500 may be used for the enforcement of sections 241, 242, 243, and 244 of the act approved March 4, 1909, entitled "An act to codify, revise, and amend the penal laws of the United States," and for the enforcement of section 1 of the act approved May 25, 1900, entitled "An act to enlarge the powers of the Department of Agriculture, prohibit the transportation by interstate commerce of game killed in violation of local laws, and for other purposes," including all necessary investigations in connection therewith (*acts May 25, 1900, vol. 31, p. 187, sec. 1; Mar. 4, 1909, vol. 35, pp. 1104, 1137, and 1138, sec. 1; Mar. 4, 1913, vol. 37, pp. 847, 848, sec. 1; May 31, 1920, vol. 41, pp. 715-717, sec. 1*) . \$200,000.00

Appropriation for 1912.....	\$12,000	Estimate for 1913.....	\$12,000
Appropriation for 1913.....	20,000	Estimate for 1914.....	18,000
Appropriation for 1914.....	50,000	Estimate for 1915.....	50,000
Appropriation for 1915.....	50,000	Estimate for 1916.....	50,000
Appropriation for 1916.....	50,000	Estimate for 1917.....	99,680
Appropriation for 1917.....	50,000	Estimate for 1918.....	100,000
Appropriation for 1918.....	50,000	Estimate for 1919.....	50,000
Appropriation for 1919.....	50,000	Estimate for 1920.....	197,000
Appropriation for 1920.....	147,000	Estimate for 1921.....	250,000
Appropriation for 1921.....	142,500	Estimate for 1922.....	200,000

NOTE.—There is an increase in this item of \$57,500, but taking into consideration transfers to the statutory roll aggregating \$6,330, the actual increase is \$63,880. It is proposed to expend this amount as follows:

(a) \$58,880 to provide adequate warden service to enforce the migratory-bird treaty act. With present appropriations it is possible to employ only 29 game wardens to cover the whole United States and Alaska. At least 1 warden should be provided for each State, and in the larger States more than 1 is needed to effectively enforce the law. A good beginning has been made in organizing the work and in affording substan-

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.																																																																																																																																																																																																																																						
<i>General Expenses, Bureau of Biological Survey—Continued.</i>																																																																																																																																																																																																																																								
<p>tial protection to migratory birds, and practically all the States testify to the increasing numbers of migratory game and insectivorous birds. The need of additional protection, however, is most urgent and should be provided if the treaty act is to be made an effective safeguard against the wanton destruction of our migratory birds. The inadequacy of the present appropriation for the enforcement of this act is evidenced by the fact that the State of Illinois alone is now expending for the enforcement of State game laws a sum equal to that provided by the Federal Government for patrolling the entire United States and Alaska. With the increase it is proposed to divide the country into three districts, with a competent supervisor for each district; and to employ 8 additional wardens to be assigned to States in which it has hitherto been impossible to afford this service or to give more than partial protection to migratory birds.</p> <p>(b) \$5,000 for investigational work in connection with migratory-bird protection. Additional funds are needed to extend investigations to determine definitely the various routes of migration and the wintering and breeding localities of the migratory birds visiting the United States. Information along these lines should be made available with the least possible delay as an aid in making suitable regulations for the enforcement of the treaty act.</p>																																																																																																																																																																																																																																								
<table><tr><th>Employees.</th><th>Rate.</th><th>Estimated, 1922.</th><th>Appropriated, 1921.</th><th>Expended, 1920.</th></tr><tr><td>Salaries:</td><td></td><td><i>Number.</i></td><td><i>Number.</i></td><td><i>Number.</i></td></tr><tr><td>Chief warden.....per annum..</td><td>\$3,840.00</td><td>1</td><td>1</td><td>1</td></tr><tr><td>Chief warden.....do.....</td><td>3,500.00</td><td></td><td></td><td>1</td></tr><tr><td>Expert.....do.....</td><td>3,250.00</td><td>1</td><td>1</td><td>1</td></tr><tr><td>Deputy chief warden.....do.....</td><td>3,000.00</td><td>1</td><td>1</td><td></td></tr><tr><td>Assistant.....do.....</td><td>2,800.00</td><td></td><td>1</td><td></td></tr><tr><td>Assistant.....do.....</td><td>2,500.00</td><td>1</td><td></td><td>1</td></tr><tr><td>Assistant.....do.....</td><td>2,400.00</td><td></td><td>1</td><td></td></tr><tr><td>Assistant.....do.....</td><td>2,250.00</td><td>1</td><td>1</td><td></td></tr><tr><td>Assistant.....do.....</td><td>2,220.00</td><td></td><td></td><td>1</td></tr><tr><td>Assistant.....do.....</td><td>2,100.00</td><td></td><td></td><td>1</td></tr><tr><td>Assistant.....do.....</td><td>2,000.00</td><td>1</td><td>1</td><td></td></tr><tr><td>Assistants.....do.....</td><td>1,800.00</td><td></td><td></td><td>2</td></tr><tr><td>Supervisor.....do.....</td><td>2,500.00</td><td>3</td><td></td><td></td></tr><tr><td>Warden.....do.....</td><td>2,000.00</td><td>1</td><td>1</td><td></td></tr><tr><td>Warden.....do.....</td><td>1,800.00</td><td>16</td><td>16</td><td>10</td></tr><tr><td>Warden.....do.....</td><td>1,680.00</td><td>1</td><td>1</td><td></td></tr><tr><td>Warden.....do.....</td><td>1,500.00</td><td>18</td><td>10</td><td>27</td></tr><tr><td>Assistant biologist.....do.....</td><td>2,800.00</td><td>1</td><td>1</td><td></td></tr><tr><td>Assistant biologist.....do.....</td><td>2,580.00</td><td></td><td></td><td>1</td></tr><tr><td>Assistant biologist.....do.....</td><td>2,500.00</td><td></td><td></td><td>1</td></tr><tr><td>Assistant biologist.....do.....</td><td>2,400.00</td><td></td><td></td><td>1</td></tr><tr><td>Assistant biologist.....do.....</td><td>2,200.00</td><td></td><td></td><td>1</td></tr><tr><td>Assistant biologist.....do.....</td><td>1,800.00</td><td>4</td><td>2</td><td>1</td></tr><tr><td>Assistant biologist.....do.....</td><td>1,600.00</td><td>2</td><td>2</td><td>2</td></tr><tr><td>Inspector.....do.....</td><td>1,800.00</td><td></td><td></td><td>1</td></tr><tr><td>Preparator.....do.....</td><td>1,500.00</td><td></td><td></td><td>1</td></tr><tr><td>Field assistant (temporary).....do.....</td><td>1,500.00</td><td></td><td>1</td><td>1</td></tr><tr><td>Field assistant.....do.....</td><td>1,400.00</td><td></td><td>1</td><td></td></tr><tr><td>Clerk.....do.....</td><td>2,500.00</td><td>1</td><td>1</td><td></td></tr><tr><td>Clerk.....do.....</td><td>2,250.00</td><td>1</td><td>1</td><td></td></tr><tr><td>Clerks (temporary), \$2,000 to \$1,000.....do.....</td><td></td><td>2</td><td>5</td><td>12</td></tr><tr><td>Messenger boy (temporary).....do.....</td><td>480.00</td><td>1</td><td>1</td><td></td></tr><tr><td>Wardens, \$1 per annum and \$3.50 per diem w. a. e.....</td><td></td><td>300</td><td>279</td><td>298</td></tr><tr><td>Agents, collaborators, and inspectors, \$600 to \$100.....per annum..</td><td></td><td>5</td><td>5</td><td>5</td></tr><tr><td>Wages:</td><td></td><td></td><td></td><td></td></tr><tr><td>Miscellaneous temporary labor—\$10 to \$3.....do.....</td><td></td><td>10</td><td>10</td><td>20</td></tr><tr><td></td><td></td><td>372</td><td>344</td><td>390</td></tr><tr><td>Salaries.....</td><td></td><td>\$107,000.00</td><td>\$86,500.00</td><td>\$68,589.56</td></tr><tr><td>Wages.....</td><td></td><td>500.00</td><td>500.00</td><td>703.53</td></tr><tr><td colspan="5">OTHER OBJECTS OF EXPENDITURE.</td></tr><tr><td>Traveling expenses.....</td><td></td><td>50,000.00</td><td>36,000.00</td><td>43,013.00</td></tr><tr><td>Equipment and material.....</td><td></td><td>15,000.00</td><td>5,500.00</td><td>11,373.97</td></tr><tr><td>Miscellaneous items.....</td><td></td><td>27,500.00</td><td>14,000.00</td><td>30,381.48</td></tr><tr><td>Total.....</td><td></td><td>200,000.00</td><td>142,500.00</td><td>154,061.54</td></tr></table>	Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.	Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>	Chief warden.....per annum..	\$3,840.00	1	1	1	Chief warden.....do.....	3,500.00			1	Expert.....do.....	3,250.00	1	1	1	Deputy chief warden.....do.....	3,000.00	1	1		Assistant.....do.....	2,800.00		1		Assistant.....do.....	2,500.00	1		1	Assistant.....do.....	2,400.00		1		Assistant.....do.....	2,250.00	1	1		Assistant.....do.....	2,220.00			1	Assistant.....do.....	2,100.00			1	Assistant.....do.....	2,000.00	1	1		Assistants.....do.....	1,800.00			2	Supervisor.....do.....	2,500.00	3			Warden.....do.....	2,000.00	1	1		Warden.....do.....	1,800.00	16	16	10	Warden.....do.....	1,680.00	1	1		Warden.....do.....	1,500.00	18	10	27	Assistant biologist.....do.....	2,800.00	1	1		Assistant biologist.....do.....	2,580.00			1	Assistant biologist.....do.....	2,500.00			1	Assistant biologist.....do.....	2,400.00			1	Assistant biologist.....do.....	2,200.00			1	Assistant biologist.....do.....	1,800.00	4	2	1	Assistant biologist.....do.....	1,600.00	2	2	2	Inspector.....do.....	1,800.00			1	Preparator.....do.....	1,500.00			1	Field assistant (temporary).....do.....	1,500.00		1	1	Field assistant.....do.....	1,400.00		1		Clerk.....do.....	2,500.00	1	1		Clerk.....do.....	2,250.00	1	1		Clerks (temporary), \$2,000 to \$1,000.....do.....		2	5	12	Messenger boy (temporary).....do.....	480.00	1	1		Wardens, \$1 per annum and \$3.50 per diem w. a. e.....		300	279	298	Agents, collaborators, and inspectors, \$600 to \$100.....per annum..		5	5	5	Wages:					Miscellaneous temporary labor—\$10 to \$3.....do.....		10	10	20			372	344	390	Salaries.....		\$107,000.00	\$86,500.00	\$68,589.56	Wages.....		500.00	500.00	703.53	OTHER OBJECTS OF EXPENDITURE.					Traveling expenses.....		50,000.00	36,000.00	43,013.00	Equipment and material.....		15,000.00	5,500.00	11,373.97	Miscellaneous items.....		27,500.00	14,000.00	30,381.48	Total.....		200,000.00	142,500.00	154,061.54		
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- (32) For investigations, experiments and demonstrations for the welfare, improvement, and increase of the reindeer industry in Alaska, including the erection of necessary buildings and other structures and cooperation with the Bureau of Education, and for the enforcement of section 1956 of the Revised Statutes as amended so far as it relates to the protection of land fur-bearing animals in Alaska, including necessary investigations in connection there-

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Bureau of Biological Survey—Continued.</i>		
<p>with, [\$40,000] \$75,000 [and hereafter the powers and duties heretofore conferred upon the Secretary of Commerce by existing law, proclamations, or Executive orders with respect to any mink, marten, beaver, land otter, muskrat, fox, wolf, wolverine, weasel, or other land fur-bearing animals in Alaska, and with respect to the leasing of certain islands in Alaska for the propagation of fur-bearing animals, are hereby conferred upon, and shall be exercised by, the Secretary of Agriculture, and the powers and duties conferred upon the Secretary of Agriculture by existing law, with respect to walruses and sea lions, are hereby conferred upon, and shall be exercised by, the Secretary of Commerce: <i>Provided</i>, That nothing in this act shall affect the powers and duties conferred upon the Secretary of Commerce by existing law, proclamations, or Executive orders with respect to fur seals and sea otters, and jurisdiction over the Pribilof Islands and the fur-bearing animals thereon; and hereafter the wardens and other officers heretofore or hereafter appointed by the Secretary of Agriculture for the protection of bird reservations in Alaska under control of the Department of Agriculture, or for the protection of fur-bearing animals in Alaska, shall have and exercise like authority and powers in the performance of their respective duties as are conferred upon game wardens by the Alaska game law of May 11, 1908 (Thirty-fifth Statutes at Large, page 102), and by existing law upon officers and agents of the Department of Commerce employed in the salmon fisheries and fur-seal and sea-otter services in Alaska:] (<i>acts May 25, 1900, vol. 31, p. 187, sec. 1; Mar. 4, 1909, vol. 35, pp. 1104, 1137, and 1138, sec. 1; Mar. 4, 1913, vol. 37, pp. 847, 848, sec. 1; May 31, 1920, vol. 41, pp. 715-717, sec. 1</i>) -----</p>	\$75,000.00	
<p>NOTE.—There is an increase of \$35,000 in this item, which amount is needed for the following purposes:</p> <p>(a) \$25,000 for reindeer investigations. Of the present appropriation of \$40,000, \$25,000 has been allotted to this work. This amount will suffice for undertaking only a part of the necessary investigations to place the reindeer industry on a solid foundation. Of the increase \$6,000 will be used for the establishment of two small experimental reindeer herds, one in the Aleutian Islands and one on the mainland probably near the Government railroad to Fairbanks; \$5,000 for the capture and transportation of about 100 caribou to grade up and increase the meat production of reindeer; \$3,600 for the employment of two additional field assistants to make a rapid survey of Alaska to determine the total area suitable for reindeer; \$2,000 for the hire of three native herders; \$2,400 for supplies and miscellaneous expenses; \$2,000 for travel expenses; \$2,500 for one-half of the cost of a power boat (one-half to be borne by the project for protection of land fur-bearing animals); and \$1,500 for one-half of the expense of the upkeep of boat, including gasoline, etc.</p> <p>(b) \$10,000 for protection of land fur-bearing animals. Of the present appropriation of \$40,000, \$15,000 has been allotted to this project. This will enable a start to be made toward a more rigid enforcement of the laws protecting these animals, but will permit only partial protection considering the vast territory that must be covered. In addition to affording protection to fur animals in their wild state, steps are being taken to encourage the breeding of foxes and other fur bearers in captivity, and a number of islands in central Alaskan waters and in the Aleutian chain not needed for other purposes have been leased for the propagation of fur animals. Much information not now available is needed regarding other islands desired for fur farming. Of the additional sum requested \$3,600 is needed for the employment of two additional wardens; \$2,000 for their traveling expenses; \$400 for supplies and miscellaneous expenses; \$2,500 for one-half of the cost of a power boat; and \$1,500 for one-half of the cost of upkeep of boat, including gasoline, etc.</p> <p>The boat will be necessary after this year in order that the reindeer experts may investigate the herds and the country or grazing territory for hundreds of miles along the coast and up the courses of streams. At the</p>		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
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General Expenses, Bureau of Biological Survey—Continued.

same time it will be urgently needed to enable the fur wardens to inspect the coast and prevent the growth of illegal trapping and traffic in furs.

The language transferring the powers and duties in connection with the law respecting fur-bearing animals in Alaska from the Secretary of Commerce to the Secretary of Agriculture is omitted, as it is permanent legislation.

Employees.	Rate.	Esti- mated, 1922.	Appro- priated, 1921.	Ex- pended, 1920. ¹
Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>
Chief veterinarian.....per annum..	\$3,600.00	1	1	.....
Veterinarian.....do.....	2,250.00	1	1	.....
Assistant biologist.....do.....	2,520.00	.....	1	.....
Assistant biologist.....do.....	2,400.00	.....	1	.....
Assistant biologist.....do.....	2,250.00	1	1	.....
Assistant in charge.....do.....	3,500.00	1	1	.....
Chief warden.....do.....	3,000.00	1	1	.....
Warden.....do.....	1,800.00	1	.....	.....
Assistant.....do.....	2,800.00	1	1	.....
Field assistant.....do.....	1,800.00	3	1	.....
Reindeer herders, \$125 to \$75..per month..	.....	3	.....	.....
Wages:				
Miscellaneous temporary labor, \$10 to \$5.....per diem..	.....	35	10	.....
		47	19	.....
Salaries.....		\$31,000.00	\$23,150.00	.....
Wages.....		10,000.00	1,000.00	.....
OTHER OBJECTS OF EXPENDITURE.				
Traveling expenses.....		17,000.00	12,500.00	.....
Equipment and material.....		10,000.00	2,350.00	.....
Miscellaneous items.....		7,000.00	1,000.00	.....
Total.....		75,000.00	40,000.00	.....

¹ No appropriation for fiscal years 1920 and 1921.

- (33) For general administrative expenses connected with the above-mentioned lines of work, including cooperation with other Federal bureaus, departments, boards, and commissions, on request from them **[\$10,760]** (*acts May 25, 1900, vol. 31, p. 187, sec. 1; Mar. 4, 1909, vol. 35, pp. 1104, 1137, and 1138, sec. 1; Mar. 4, 1913, vol. 37, pp. 847, 848, sec. 1; May 31, 1920, vol. 41, pp. 715-717, sec. 1*) --- \$20,000.00

Appropriation for 1912.....	\$14,200	Estimate for 1913.....	\$13,300
Appropriation for 1913.....	13,300	Estimate for 1914.....	15,000
Appropriation for 1914.....	14,000	Estimate for 1915.....	15,000
Appropriation for 1915.....	15,000	Estimate for 1916.....	13,320
Appropriation for 1916.....	13,320	Estimate for 1917.....	12,560
Appropriation for 1917.....	12,560	Estimate for 1918.....	15,000
Appropriation for 1918.....	12,560	Estimate for 1919.....	10,670
Appropriation for 1919.....	10,760	Estimate for 1920.....	10,760
Appropriation for 1920.....	10,760	Estimate for 1921.....	15,000
Appropriation for 1921.....	10,760	Estimate for 1922.....	20,000

NOTE.—There is an increase in this item of \$9,240. The work of the bureau has greatly increased in recent years, but there has been no corresponding increase in the fund for maintaining the administrative office. The small additional amount recommended is needed to meet the increased cost of supplies and equipment, for necessary travel involved in conducting cooperative work with other branches of the Federal service, and for salaries of additional assistants required from time to time to meet special demands.

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.					Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Bureau of Biological Survey—Continued.</i>						
Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.		
Salaries:		Number.	Number.	Number.		
Assistant chief of bureau..... per annum..	\$3,900.00	1	1			
Assistant chief of bureau..... do.....	3,600.00			1		
Assistants..... do.....	2,400.00	2				
Assistant..... do.....	2,220.00			1		
Assistant biologist..... do.....	3,600.00	1	1			
Assistant biologist..... do.....	3,000.00			1		
Expert..... do.....	3,250.00		1			
Clerks (temporary), \$1,800 to \$1,200.. do.....		3	1	4		
Messenger boy..... do.....	480.00		1			
		7	5	7		
Salaries.....		\$13,100.00	\$6,000.00	\$5,208.49		
OTHER OBJECTS OF EXPENDITURE.						
Traveling expenses.....		3,500.00	2,000.00	1,950.72		
Equipment and material.....		1,300.00	900.00	1,335.42		
Telephone and telegraph service.....		700.00	425.00	354.51		
Miscellaneous items.....		1,400.00	1,435.00	1,335.45		
Total.....		20,000.00	10,760.00	10,184.59		
In all, for general expenses.....					\$984,435.00	\$718,435.00
Appropriations for 1912.....	\$115,700	Estimates for 1913.....	\$108,300			
Appropriations for 1913.....	166,300	Estimates for 1914.....	143,000			
Appropriations for 1914.....	141,000	Estimates for 1915.....	233,500			
Appropriations for 1915.....	248,500	Estimates for 1916.....	236,820			
Appropriations for 1916.....	411,820	Estimates for 1917.....	449,880			
Deficiency act.....	75,000					
Appropriations for 1917.....	534,200	Estimates for 1918.....	613,140			
Appropriations for 1918.....	545,700	Estimates for 1919.....	538,090			
Appropriations for 1919.....	538,180	Estimates for 1920.....	655,400			
Appropriations for 1920.....	686,200	Estimates for 1921.....	909,135			
Appropriations for 1921.....	718,435	Estimates for 1922.....	984,435			
<i>Statement of clerks employed in District of Columbia under lump-fund appropriations for 30 days or more during the fiscal year ended June 30, 1920 (32 Stat., p. 303).</i>						
GENERAL EXPENSES—BUREAU OF BIOLOGICAL SURVEY.						
2 clerks, at \$2,000 each per annum.	1 clerk, \$1,320 per annum.					
3 clerks, at \$1,800 each per annum.	4 clerks, at \$1,200 each per annum.					
3 clerks, at \$1,600 each per annum.	1 clerk, \$1,100 per annum.					
2 clerks, at \$1,500 each per annum.	1 clerk, \$1,000 per annum.					
10 clerks, at \$1,400 each per annum.						
Total for Bureau of Biological Survey.....					1,079,265.00	785,885.00

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
DIVISION OF ACCOUNTS AND DISBURSEMENTS.		
<i>Salaries, Division of Accounts and Disbursements—</i>		
(1) One chief of division and disbursing clerk (increase of \$1,000) (<i>R. S., p. 87, secs. 520–523; act May 31, 1920, vol. 41, p. 717, sec. 1</i>)	\$5,000. 00	
NOTE.—An increase of \$1,000 in the salary of the chief of division is recommended. See note under item 1, p. 19.		
(2) One supervising auditor (<i>same acts</i>)	2,250. 00	
(3) One cashier and chief clerk (<i>same acts</i>)	2,250. 00	
(4) One deputy disbursing clerk (<i>same acts</i>)	2,000. 00	
(5) One accountant and bookkeeper (<i>same acts</i>)	2,000. 00	
(6) Two clerks, class 4 (<i>same acts</i>)	3,600. 00	
(7) Five clerks, class 3 (increase of 1) (<i>same acts</i>)	8,000. 00	
NOTE.—Three additional clerical places are recommended, one of class 3, one of class 2, and one of class 1. The steady growth of appropriations of the department and the additional work imposed upon the division through various acts of Congress make it more and more difficult with the present force to assure the prompt payment of accounts. In an effort to keep pace with the work, a number of low-salaried clerks have from time to time been detailed from various bureaus of the department. This sort of help has proven wholly unsatisfactory because of the lack of experience of such clerks in accounting work.		
(8) Seven clerks, class 2 (increase of 1) (<i>same acts</i>)	9,800. 00	
NOTE.—See note under item 7.		
(9) Fourteen clerks, class 1 (increase of 1) (<i>same acts</i>)	16,800. 00	
NOTE.—See note under item 7.		
(10) Two clerks, at \$1,000 each (<i>same acts</i>)	2,000. 00	
(11) One messenger (<i>same acts</i>)	720. 00	
(12) One messenger boy (<i>same acts</i>)	600. 00	
Appropriations for 1912..... \$97,520 Estimates for 1913..... \$104,620		
Appropriations for 1913..... 104,620 Estimates for 1914..... 104,170		
Appropriations for 1914..... 104,370 Estimates for 1915..... 59,920		
Appropriations for 1915..... 46,320 Estimates for 1916..... 44,920		
Appropriations for 1916..... 44,920 Estimates for 1917..... 44,920		
Appropriations for 1917..... 44,920 Estimates for 1918..... 44,720		
Appropriations for 1918..... 44,920 Estimates for 1919..... 44,920		
Appropriations for 1919..... 44,920 Estimates for 1920..... 44,620		
Appropriations for 1920..... 44,620 Estimates for 1921..... 50,620		
Appropriations for 1921..... 49,820 Estimates for 1922..... 55,020		
NOTE.—Apparent increase, \$5,200; actual increase, \$5,200; as follows:		
<i>Promotion.</i>		
1 chief of division, from \$4,000 to \$5,000.....	\$1,000	
<i>New places.</i>		
1 clerk, class 3.....	\$1,600	
1 clerk, class 2.....	1,400	
1 clerk, class 1.....	1,200	
	<hr/> 4,200	
Increase.....	5,200	
Total for Division of Accounts and Disbursements	\$55,020. 00	\$49,820. 00

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
DIVISION OF PUBLICATIONS.		
<i>Salaries, Division of Publications—</i>		
(1) One chief of division (increase of \$2,500) (<i>R. S., p. 87, secs. 520-523; acts Mar. 1, 1899, vol. 30, p. 948, sec. 1; May 31, 1920, vol. 41, pp. 717, 718, sec. 1</i>)-----	\$6, 000. 00	
NOTE.—An increase of \$2,500 in the salary of the chief of division is recommended, in order to provide a compensation more nearly commensurate with the duties performed. (See note under item 1, page 19.)		
(2) One chief editor (increase of \$1,500) (<i>same acts</i>)-----	4, 500. 00	
NOTE.—This position has been vacant for several months for the reason that the present salary will not attract the type of chief editor needed by the department. The duties of the position require a thorough knowledge of journalistic work, and, in addition, the appointee must be qualified in agriculture, preferably a graduate of a recognized agricultural college, and one who is familiar with the latest developments in all branches of agriculture and whose personal qualifications are such as will enable him to deal successfully with the scientific investigators in the department who prepare the bulletins originally. The chief editor gives special attention to seeing that the bulletins, when issued, are in such practical, popular form that they will be well adapted to use by farmers and others for whom they are chiefly intended. The increase recommended will provide a salary which it is thought will attract men with the necessary qualifications.		
(3) 【One assistant chief of division, \$2,500.】		
NOTE.—See note under item 4.		
(4) One assistant (<i>submitted</i>)-----	2, 500. 00	
NOTE.—One assistant at \$2,500 is submitted in lieu of one assistant chief of division at the same salary. This change of designation is recommended for the reason that under the present organization of the division there is no need of an assistant chief. The employee now occupying this position handles the department end of the printing work performed at the Government Printing Office for the various bureaus, and the title "assistant chief" does not accurately indicate the character of his duties.		
(5) One assistant in charge of exhibits (<i>R. S., p. 87, secs. 520-523; acts Mar. 1, 1899, vol. 30, p. 948, sec. 1; May 31, 1920, vol. 41, pp. 717, 718, sec. 1</i>)-----	3, 000. 00	
(6) One assistant in charge of information (increase of \$1,000) (<i>same acts</i>)-----	4, 000. 00	
NOTE.—This employee is in charge of the Office of Information, being responsible for the publication of the Weekly News Letter and the preparation and distribution to the press of information relative to the current developments in agriculture. The present salary is entirely inadequate for the character of the work performed. In addition to supervising the work of the other editors in this section, the assistant in charge must keep in close touch with the progress being made on the various projects in all of the bureaus of the department in order that the public may receive agricultural information of current value just as quickly as it becomes available. Similar work in outside employment, in connection with a farm journal, for instance, would command a salary in excess of that recommended.		
(7) One assistant in charge of motion-picture activities (<i>same acts</i>)-----	3, 000. 00	
(8) 【One superintendent of distribution, \$2,500.】		
NOTE.—See note under item 9.		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>Salaries, Division of Publications—Continued.</i>		
(9) One assistant in charge of distribution (<i>submitted</i>) -----	\$2, 500. 00	
NOTE.—One assistant in charge of distribution, at \$2,500, is submitted in lieu of one superintendent of distribution at the same salary. This change in designation is proposed in order to more accurately indicate the character of the duties performed. It will also make the title conform with those of other section heads of the division.		
(10) One assistant in charge of indexing (<i>R. S., p. 87, secs. 520–523; acts Mar. 1, 1899, vol. 30, p. 948, sec. 1; May 31, 1920, vol. 41, pp. 717, 718, sec. 1</i>) -----	2, 000. 00	
(11) One chief clerk (increase of \$500) (<i>same acts</i>) -----	2, 500. 00	
NOTE.—The chief clerk supervises the general business operations of the division, including the accounting, clerical, and record work and the procuring of supplies and equipment. He must be thoroughly familiar with all phases of the work of the division. The salary of the position has remained at \$2,000 since 1908, despite the fact that there has been a great increase in the activities and volume of business handled by the division. The increase recommended will provide a compensation more nearly commensurate with the work performed and make the salary of the position comparable with that paid for similar responsibility in other branches of the service.		
(12) One assistant in exhibits (<i>same acts</i>) -----	2, 000. 00	
(13) Three assistants, at \$2,000 each (increase of 1) (<i>same acts</i>) --	6, 000. 00	
NOTE.—One additional assistant, at \$2,000, is recommended in lieu of one assistant in charge of document section, at \$2,000 (item 37). Under the present organization of the division the document section has been merged with the distribution section and the present designation of this position is no longer appropriate.		
(14) Four assistant editors, at \$2,000 each (increase of 3) (<i>same acts</i>) -----	8, 000 00	
NOTE.—Three additional assistant editor positions, at \$2,000 each, are recommended in lieu of a similar number of \$1,800 positions (item 15). This change is desirable in order to standardize the salaries of assistant editors and to recognize the valuable services rendered by the three employees now receiving \$1,800. The work of these employees requires special ability and training, and all of them are well worth the small increase recommended.		
(15) [Three assistant editors, at \$1,800 each.]		
NOTE.—See note under item 14.		
(16) One assistant editor (<i>same acts</i>) -----	1, 600. 00	
(17) One assistant (<i>submitted</i>) -----	1, 600. 00	
NOTE.—This position is submitted in lieu of one assistant at \$1,400, in order to provide a small promotion for the employee having charge of the records incident to the maintenance of the numerous and complex mailing lists of the department in the Division of Publications and at the Government Printing Office. The responsibilities of this position are exacting and involve the supervision of about 12 employees. The increase recommended is fully merited.		
(18) One assistant (decrease of 1) (<i>R. S., p. 87, secs. 520–523; acts Mar. 1, 1899, vol. 30, p. 948, sec. 1; May 31, 1920, vol. 41, pp. 717, 718, sec. 1</i>) -----	1, 400. 00	
NOTE.—See note under item 17.		
(19) One indexer or compiler (<i>same acts</i>) -----	1, 800. 00	

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>Salaries, Division of Publications—Continued.</i>		
(20) One indexer (increase of \$200) (<i>R. S., p. 87, secs. 520-523; acts Mar. 1, 1899, vol. 30, p. 948, sec. 1; May 31, 1920, vol. 41, pp. 717, 718, sec. 1</i>) -----	\$1, 600. 00	
NOTE.—Considerable difficulty has been experienced in retaining the services of a competent employee at the salary provided. After having been vacant for some time, the position is now filled by an employee whose services can be retained only through an increase in salary.		
(21) One information assistant (<i>submitted</i>) -----	3, 000. 00	
NOTE.—This is a new position. The division is in urgent need of the services of an employee to prepare good display matter for effective use in various educational campaigns conducted by the department. The duties of this position will consist of the devising of posters, circulars, form letters, booklets, and similar matter. The salary recommended is believed to be the lowest that will attract a person with the necessary qualifications.		
(22) One chief cinematographer (<i>submitted</i>) -----	2, 500. 00	
NOTE.—This position is recommended in order to provide for the continued employment, at a more nearly commensurate salary for the work he performs, of the chief photographer and officer in charge of the department motion-picture laboratory. This employee is thoroughly familiar with the technique of the entire motion-picture field and is a high-class motion-picture camera man. In the commercial world a person of his qualifications could command a much higher salary than the department is able to pay.		
(23) [One assistant in charge of illustrations, \$2,100.]		
NOTE.—See note under item 24.		
(24) One draftsman or photographer (<i>submitted</i>) -----	2, 100. 00	
NOTE.—This position is recommended in lieu of one assistant in charge of illustrations at the same salary (item 23). The work of the section of illustrations is at present under the direction of the employee who occupies the statutory place of artist and designer, at \$2,500 (item 25). The employee occupying the position of assistant in charge of illustrations is the head draftsman in the section of illustrations, and the title recommended will better indicate his duties.		
(25) One artist and designer (<i>R. S., p. 87, secs. 520-523; acts Mar. 1, 1899, vol. 30, p. 948, sec. 1; May 31, 1920, vol. 41, pp. 717, 718, sec. 1</i>) -----	2, 500. 00	
(26) Six draftsmen or photographers, at \$1,800 each (<i>submitted</i>) ..	10, 800. 00	
NOTE.—These positions and 9 draftsmen or photographers, at \$1,400 each (item 29), are submitted in lieu of 2 draftsmen or photographers, at \$1,500 each, 1 at \$1,300, 10 at \$1,200 each, and 1 lantern-slide colorist at \$1,200 (items 28, 30, 31, and 33). This readjustment will result in an increase of \$5,900 in salaries and one additional place. Another high-class man is needed to assist in handling the increasing volume of designing work in the illustrations section. The proposed change will also make possible the promotion of draftsmen and photographers especially skilled in the preparation of illustrations pertaining to the various phases of agriculture. In the face of high living expenses and the many attractive inducements offered qualified employees in these lines by commercial enterprises, the department's work is suffering through inability to retain its staff intact because of the inadequacy of the salaries now paid.		
(27) Three draftsmen or photographers, at \$1,600 each (<i>R. S., p. 87, secs. 520-523; acts Mar. 1, 1899, vol. 30, p. 948, sec. 1; May 31, 1920, vol. 41, pp. 717, 718, sec. 1</i>) -----	4, 800. 00	
(28) [Two draftsmen or photographers, at \$1,500 each.]		
NOTE.—See note under item 26.		
(29) Eleven draftsmen or photographers, at \$1,400 each (increase of 9) (<i>same acts</i>) -----	15, 400. 00	
NOTE.—See note under item 26.		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>Salaries, Division of Publications—Continued.</i>		
(30) 【One draftsman or photographer, \$1,300.】		
NOTE.—See note under item 26.		
(31) 【Ten draftsmen or photographers, at \$1,200 each.】		
NOTE.—See note under item 26.		
(32) 【One assistant photographer, \$960.】		
NOTE.—See note under item 34.		
(33) 【One lantern-slide colorist, \$1,200.】		
NOTE.—See note under item 26.		
(34) Four laboratory aids, at \$1,200 each (<i>submitted</i>)	\$4, 800. 00	
NOTE.—Two of the above places are submitted in lieu of 1 laboratory aid at \$900 and 1 assistant photographer at \$960 (items 32 and 36). This will provide promotions of \$300 and \$240, respectively, for employees who are skilled in photographic laboratory work and are greatly underpaid considering present living conditions. The proposed changes in designation will provide titles which more accurately describe the character of work performed and will afford greater latitude in filling vacancies. The two new places recommended will provide for much needed additional help in the motion-picture laboratory.		
(35) One laboratory aid (<i>submitted</i>)	1, 080. 00	
NOTE.—This new place is requested in order to provide for the promotion of a messenger boy at \$720, who has served in the photographic laboratory for several years and has attained a degree of proficiency which makes it an injustice longer to retain him at the present salary. He is fully qualified as an assistant photographer. It is not proposed to drop the messenger boy position at \$720 (item 65) which he will vacate if the new place as laboratory aid is provided. An additional messenger is urgently needed in the addressing and duplicating section of the division in connection with the operation of automatic machines.		
(36) 【One laboratory aid, \$900.】		
NOTE.—See note under item 34.		
(37) 【One assistant in charge of document section, \$2,000.】		
NOTE.—See note under item 13.		
(38) 【One assistant in document section, \$1,800.】		
NOTE.—See note under item 39.		
(39) Three assistants, at \$1,800 each (<i>submitted</i>)	5, 400. 00	
NOTE.—Two of the above positions are submitted in lieu of 1 assistant in document section, at \$1,800 (item 38), and 1 foreman, miscellaneous distribution, at \$1,500 (item 40). The latter employee supervises the section engaged in the miscellaneous distribution of publications and must understand thoroughly the work of the various units of the addressing, duplicating, and mailing section during the absence of the officer in charge of that section. Work of this character, involving supervisory duties, fully warrants the salary recommended. The proposed changes in title are recommended to provide designations that will conform to the present organization of the division.		
One new place at \$1,800 is also recommended. Additional assistance is urgently needed to handle the present mailing system of the division. The division is called upon to handle from 2,000 to 3,000 mail requests daily for publications and miscellaneous information. An assistant is needed to take charge of the work and improve the service. In order to secure a competent employee for this work, it will be necessary to pay \$1,800.		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>Salaries, Division of Publications—Continued.</i>		
(40) 【One foreman, miscellaneous distribution, \$1,500.】		
NOTE.—See note under item 39.		
(41) One executive clerk (<i>submitted</i>) -----	\$2, 000. 00	
NOTE.—This new place is requested in order to provide a promotion for the head clerk in the Office of Information, now receiving \$1,800 (item 42). His duties require a thorough knowledge of all the activities of the office, and he is responsible for the clerical and related work and for its general business operations.		
(42) Four clerks, class 4 (increase of 3, 2 by transfer from lump fund, and 1 new place) (<i>R. S., p. 87, secs. 520-523; acts Mar. 1, 1899, vol. 30, p. 948, sec. 1; May 31, 1920, vol. 41, pp. 717, 718, sec. 1</i>) -----	7, 200. 00	
NOTE.—If provision is made for the new place in item 41, one of the present clerks of class 4 will be advanced to that position. Item 42, therefore, provides for two additional \$1,800 places. One of these is desired in order to provide a competent head clerk for the illustrations section of the division. This employee will handle the business operations of the section and assist in the general administration of the office. A capable employee is also needed to take charge of the mails and files section of the division. At present separate files are maintained in each section of the division and, as a result, considerable confusion exists. An urgent need exists for the consolidation of all the filing work in one unit equipped and operated according to modern filing methods. A competent employee to take charge of this unit and supervise the work and the personnel involved can not be secured under present conditions for less than \$1,800 per annum.		
(43) Six clerks, class 3 (increase of 5, 1 by transfer from statutory roll, Secretary's office, and 4 new places) (<i>same acts</i>) - - - -	9, 600. 00	
NOTE.—These 4 additional clerks of class 3, and 4 of class 2, 3 at \$1,320 each, 10 of class 1, and 52 at \$1,080 each (items 44, 45, 46, and 48) are submitted in lieu of 18 at \$1,100 each, 40 at \$960 each, and 12 at \$900 each (items 47, 49, and 50). This readjustment involves an increase of 3 in the number of places, and \$15,120 in the total amount. The salary scale of the Division of Publications is inadequate to secure and retain the right sort of help. The turnover in the \$900 and \$960 grades has been so constant as to greatly hamper the work of the division. A greater number of higher-paid places will make it possible to promote deserving employees and result in greater stability in the force. These changes contemplate the appointment of three new stenographers in the \$1,320 grade. The shortage of qualified stenographers is acute, and the work of important and relatively high-salaried officers in the division frequently is handicapped by the lack of this class of assistance. The volume of mail handled by the division increases constantly, miscellaneous requests for publications, received from all parts of the country, averaging from 2,000 to 3,000 daily.		
One clerk of class 3 is transferred from the statutory roll of the Secretary's office, with a corresponding reduction in the roll of that office. This employee is detailed to the Division of Publications for duty in the accounting office in connection with the department's exhibits activities and will be needed permanently in that work.		
(44) Eleven clerks, class 2 (increase of 4) (<i>same acts</i>) -----	15, 400. 00	
NOTE.—See note under item 43.		
(45) Four clerks, at \$1,320 each (1 by transfer from lump fund, and 3 new places) (<i>same acts</i>) -----	5, 280. 00	
NOTE.—See note under item 43.		
(46) Twenty-nine clerks, class 1 (increase of 11, 1 by transfer from lump fund, and 10 new places) (<i>same acts</i>) -----	34, 800. 00	
NOTE.—See note under item 43.		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>Salaries, Division of Publications—Continued.</i>		
(47) [Eighteen clerks, at \$1,100 each.]		
NOTE.—See note under item 43.		
(48) Fifty-two clerks, at \$1,080 each (<i>submitted</i>)	\$56, 160. 00	
NOTE.—See note under item 43.		
(49) [Forty clerks, at \$960 each.]		
NOTE.—See note under item 43.		
(50) [Twelve clerks, at \$900 each.]		
NOTE.—See note under item 43.		
(51) One mechanical assistant (<i>submitted</i>)	1, 400. 00	
NOTE.—This position is submitted in lieu of 1 machine operator, \$1,200 (item 53). This employee is engaged in the operation, repair, and general upkeep of the addressograph, graphotype, and folding machines, which work requires a high grade of mechanical skill, and the small increase in compensation is fully merited. The proposed change in designation will more accurately indicate the duties performed.		
(52) Two foremen, at \$1,400 each (<i>submitted</i>)	2, 800. 00	
NOTE.—These additional places are submitted to provide promotions of \$200 each for two employees who supervise groups of machine operators engaged, respectively, in multigraph and addressograph work. At present they receive the same salary as some of the employees engaged in routine work under their supervision, and it is believed that the higher-grade work which they perform should be recognized by a slightly increased compensation. The change in designation recommended will better indicate the character of the work which they perform.		
(53) Three machine operators, at \$1,200 each (decrease of 2) (<i>R. S., p. 87, secs. 520-523; acts Mar. 1, 1899, vol. 30, p. 948, sec. 1; May 31, 1920, vol. 41, pp. 717, 718, sec. 1</i>)	3, 600. 00	
NOTE.—Three of the present machine operators of this grade are recommended for promotion to \$1,400, with changes in designation to mechanical assistant and foreman. (See items 51 and 52.) Only two of the positions are, however, recommended omitted, as it will be necessary to employ an additional machine operator at \$1,200 to help to care for the increased work in the addressing, duplicating, and mailing section, due to the recently inaugurated plan of centralizing in the Division of Publications work of this character required by all the bureaus of the department.		
(54) [One chief folder, \$1,200.]		
NOTE.—See note under item 55.		
(55) Seventeen messengers or laborers, at \$900 each (increase of 14) (<i>same acts</i>)	15, 300. 00	
NOTE.—Fourteen messengers or laborers at \$900 each, 10 skilled laborers at \$1,200 each, and 13 skilled laborers at \$1,020 each (items 55, 62, and 64) are submitted in lieu of 8 skilled laborers at \$1,100 each, 10 messengers or laborers at \$840 each, 4 at \$780 each, 10 at \$720 each, 3 at \$600 each, 1 chief folder \$1,200, and 1 folder \$1,200 (items 54, 56, 57, 58, 59, 60, 62, and 63).		
This readjustment does not affect the number of employees, but involves an increase in total salaries of \$6,140. The new \$1,200 and \$1,020 places are recommended in order to provide for the promotion of employees who are rendering satisfactory service and who are underpaid. These employees are chiefly skilled machine operators who work on the various labor-saving devices and in filling orders for publications. Through long experience they have become familiar with the publication and duplicating work of the department and are worth the small increases requested. The 14 messenger or laborer positions at \$900 are substituted for 17 positions in the \$780, \$720, and \$600 grades. The latter salaries are entirely too small considering present living conditions.		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>Salaries, Division of Publications—Continued.</i>		
(56) 【Ten messengers or laborers, at \$840 each.】 NOTE.—See note under item 55.		
(57) 【Four messengers or laborers, at \$780 each.】 NOTE.—See note under item 55.		
(58) 【Ten messengers or laborers, at \$720 each.】 NOTE.—See note under item 55.		
(59) 【Three messengers or laborers, at \$600 each.】 NOTE.—See note under item 55.		
(60) 【One folder, \$1,200.】 NOTE.—See note under item 55.		
(61) Two folders, at \$1,000 each (<i>R. S., p. 87, secs. 520–523; acts Mar. 1, 1899, vol. 30, p. 948, sec. 1; May 31, 1920, vol. 41, pp. 717, 718, sec. 1</i>)	\$2, 000. 00	
(62) Ten skilled laborers, at \$1,200 each (<i>submitted</i>)	12, 000. 00	
NOTE.—See note under item 55.		
(63) 【Eight skilled laborers, at \$1,100 each.】 NOTE.—See note under item 55.		
(64) Thirteen skilled laborers, at \$1,020 each (<i>submitted</i>)	13, 260. 00	
NOTE.—See note under item 55.		
(65) Eight messenger boys, at \$720 each (decrease of 1 by transfer to statutory roll, Secretary's office) (<i>R. S., p. 87, secs. 520–523; acts Mar. 1, 1899, vol. 30, p. 948, sec. 1; May 31, 1920, vol. 41, pp. 717, 718, sec. 1</i>)	5, 760. 00	
NOTE.—One messenger boy at \$720 is at present detailed to the office of the Secretary, where his services will be permanently needed. The transfer of the position to the statutory roll of the Secretary's office is therefore recommended. (See also note under item 35.)		
(66) Six messenger boys, at \$600 each (<i>same acts</i>)	3, 600. 00	
(67) Four messenger boys, at \$480 each (increase of 2 by transfer from statutory roll, Secretary's office) (<i>same acts</i>)	1, 920. 00	
NOTE.—Two messenger boys, at \$480 each, are at present detailed from the Secretary's office to the Division of Publications, where their services will be permanently needed. Provision is therefore made for the transfer of the positions.		
(68) Three charwomen, at \$480 each (<i>same acts</i>)	1, 440. 00	
(69) Four charwomen, at \$240 each (<i>same acts</i>)	960. 00	
Appropriation for 1912..... \$179,960 Estimate for 1913..... \$181,110 Appropriation for 1913..... 194,700 Estimate for 1914..... 165,810 Appropriation for 1914..... 166,410 Estimate for 1915..... 171,090 Appropriation for 1915..... 170,750 Estimate for 1916..... 174,750 Appropriation for 1916..... 174,750 Estimate for 1917..... 175,830 Appropriation for 1917..... 177,490 Estimate for 1918..... 184,160 Appropriation for 1918..... 181,920 Estimate for 1919..... 178,920 Appropriation for 1919..... 178,920 Estimate for 1920..... 179,120 Appropriation for 1920..... 196,070 Estimate for 1921..... 265,130 Appropriation for 1921..... 242,020 Estimate for 1922..... 300,860		
	\$300, 860. 00	\$242, 020. 00

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>Salaries, Division of Publications—Continued.</i>		
NOTE.—Apparent increase, \$58,840; actual increase, \$52,720, as follows:		
<i>Promotions.</i>		
1 chief of division, from \$3,500 to \$6,000.....	\$2, 500	
1 chief editor, from \$3,000 to \$4,500.....	1, 500	
1 assistant in charge of information, from \$3,000 to \$4,000.....	1, 000	
1 chief clerk, from \$2,000 to \$2,500.....	500	
1 indexer, from \$1,400 to \$1,600.....	200	
	<u>\$5, 700</u>	
<i>New places.</i>		
1 assistant.....	2, 500	
1 assistant in charge of distribution.....	2, 500	
1 assistant.....	2, 000	
3 assistant editors, at \$2,000 each.....	6, 000	
1 assistant.....	1, 600	
1 information assistant.....	3, 000	
1 chief cinematographer.....	2, 500	
1 draftsman or photographer.....	2, 100	
6 draftsmen or photographers, at \$1,800 each..	10, 800	
9 draftsmen or photographers, at \$1,400 each..	12, 600	
4 laboratory aids, at \$1,200 each.....	4, 800	
1 laboratory aid.....	1, 080	
3 assistants, at \$1,800 each.....	5, 400	
1 executive clerk.....	2, 000	
1 clerk, class 4.....	1, 800	
4 clerks, class 3.....	6, 400	
4 clerks, class 2.....	5, 600	
3 clerks, at \$1,320 each.....	3, 960	
10 clerks, class 1.....	12, 000	
52 clerks, at \$1,080 each.....	56, 160	
1 mechanical assistant.....	1, 400	
2 foremen, at \$1,400 each.....	2, 800	
14 messengers or laborers, at \$900 each.....	12, 600	
10 skilled laborers, at \$1,200 each.....	12, 000	
13 skilled laborers, at \$1,020 each.....	13, 260	
	<u>186, 860</u>	
<i>Transfers from statutory roll, Secretary's office.</i>		
1 clerk, class 3.....	1, 600	
2 messenger boys, at \$480 each.....	960	
	<u>2, 560</u>	
	<u>\$195, 120</u>	
<i>Places dropped.</i>		
1 assistant chief of division.....	2, 500	
1 superintendent of distribution.....	2, 500	
3 assistant editors, at \$1,800 each.....	5, 400	
1 assistant.....	1, 400	
1 assistant in charge of illustrations.....	2, 100	
2 draftsmen or photographers, at \$1,500 each..	3, 000	
1 draftsman or photographer.....	1, 300	
10 draftsmen or photographers, at \$1,200 each..	12, 000	
1 assistant photographer.....	960	
1 lantern-slide colorist.....	1, 200	
1 laboratory aid.....	900	
1 assistant in charge of document section.....	2, 000	
1 assistant in document section.....	1, 800	
1 foreman, miscellaneous distribution.....	1, 500	
18 clerks, at \$1,100 each.....	19, 800	
40 clerks, at \$960 each.....	38, 400	
12 clerks, at \$900 each.....	10, 800	
2 machine operators, at \$1,200 each.....	2, 400	
1 chief folder.....	1, 200	
10 messengers or laborers, at \$840 each.....	8, 400	
4 messengers or laborers, at \$780 each.....	3, 120	
10 messengers or laborers, at \$720 each.....	7, 200	
3 messengers or laborers, at \$600 each.....	1, 800	
1 folder.....	1, 200	
8 skilled laborers, at \$1,100 each.....	8, 800	
	<u>141, 680</u>	
<i>Transfer to statutory roll, Secretary's office.</i>		
1 messenger boy.....	720	
	<u>142, 400</u>	
Actual increase.....	<u>52, 720</u>	

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>Salaries, Division of Publications—Continued.</i>		
<i>Transfers from lump fund, which fund has been correspondingly reduced.</i>		
2 clerks, class 4.....	\$3, 600	
1 clerk.....	1, 320	
1 clerk, class 1.....	1, 200	
	<hr/>	
	\$6, 120	
Apparent increase.....	58, 840	
<i>General Expenses, Division of Publications—</i>		
(70) For miscellaneous objects of expenditure in connection with the publication, indexing, illustration, and distribution of bulletins, documents, and reports, as follows (<i>act May 31, 1920, vol. 41, p. 718, sec. 1</i>):		
(71) For labor-saving machinery, including necessary supplies (<i>same acts</i>).....	\$6, 000. 00	
Appropriation for 1912.....	\$3, 000	Estimate for 1913..... \$3, 100
Appropriation for 1913.....	3, 000	Estimate for 1914..... 1, 500
Appropriation for 1914.....	2, 000	Estimate for 1915..... 2, 000
Appropriation for 1915.....	2, 000	Estimate for 1916..... 2, 000
Appropriation for 1916.....	2, 000	Estimate for 1917..... 3, 000
Appropriation for 1917.....	3, 000	Estimate for 1918..... 3, 500
Appropriation for 1918.....	3, 500	Estimate for 1919..... 3, 500
Appropriation for 1919.....	3, 500	Estimate for 1920..... 5, 000
Appropriation for 1920.....	5, 000	Estimate for 1921..... 6, 000
Appropriation for 1921.....	6, 000	Estimate for 1922..... 6, 000
(72) For envelopes, stationery, and materials ["\$9,000"] (<i>same acts</i>)..	12, 000. 00	
Appropriation for 1912.....	\$11, 500	Estimate for 1913..... \$11, 500
Appropriation for 1913.....	11, 500	Estimate for 1914..... 6, 000
Appropriation for 1914.....	6, 000	Estimate for 1915..... 6, 000
Appropriation for 1915.....	6, 000	Estimate for 1916..... 6, 000
Appropriation for 1916.....	6, 000	Estimate for 1917..... 6, 500
Appropriation for 1917.....	6, 500	Estimate for 1918..... 6, 500
Appropriation for 1918.....	6, 500	Estimate for 1919..... 7, 500
Appropriation for 1919.....	7, 500	Estimate for 1920..... 7, 500
Appropriation for 1920.....	7, 500	Estimate for 1921..... 9, 000
Appropriation for 1921.....	9, 000	Estimate for 1922..... 12, 000
NOTE.—There is an increase in this item of \$3,000. This additional amount will be necessary in order to meet the increased cost of envelopes, stationery, and similar materials, which have advanced in price approximately 75 per cent during the past year.		
(73) For office furniture and fixtures ["\$1,320"] (<i>same acts</i>).....	3, 000. 00	
Appropriation for 1912.....	\$1, 000	Estimate for 1913..... \$1, 000
Appropriation for 1913.....	1, 000	Estimate for 1914..... 1, 000
Appropriation for 1914.....	1, 000	Estimate for 1915..... 1, 000
Appropriation for 1915.....	1, 000	Estimate for 1916..... 1, 000
Appropriation for 1916.....	1, 000	Estimate for 1917..... 1, 000
Appropriation for 1917.....	1, 000	Estimate for 1918..... 1, 320
Appropriation for 1918.....	1, 320	Estimate for 1919..... 1, 320
Appropriation for 1919.....	1, 320	Estimate for 1920..... 1, 320
Appropriation for 1920.....	1, 320	Estimate for 1921..... 1, 600
Appropriation for 1921.....	1, 320	Estimate for 1922..... 3, 000
NOTE.—There is an increase in this item of \$1,680. A large part of the furniture now in use in the Division of Publications is old and should be replaced by equipment of a more modern and sanitary type. Much of this material can be secured from the surplus stocks available through the General Supply Committee and the money transferred into the Treasury. The increase recommended will be used partly for this purpose and partly to meet the advanced cost of additional equipment.		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Division of Publications—Continued.</i>		
(74) For photographic equipment and for photographic materials and artists' tools and supplies, ["\$22,000"] \$25,000 [": Provided, That hereafter the Secretary of Agriculture is authorized, under such rules and regulations and subject to such conditions as he may prescribe, to loan, rent, or sell copies of films: Provided, That in the sale or rental of films educational institutions or associations for agricultural education not organized for profit shall have preference; all moneys received from such rentals or sales to be covered into the Treasury of the United States as miscellaneous receipts"] (act May 31, 1920, vol. 41, p. 718, sec. 1) \$25,000.00		
Appropriation for 1912..... \$5,000 Estimate for 1913..... \$5,000 Appropriation for 1913..... 5,000 Estimate for 1914..... 6,000 Appropriation for 1914..... 6,000 Estimate for 1915..... 6,000 Appropriation for 1915..... 6,000 Estimate for 1916..... 6,000 Appropriation for 1916..... 6,000 Estimate for 1917..... 6,000 Appropriation for 1917..... 6,000 Estimate for 1918..... 25,000 Appropriation for 1918..... 17,000 Estimate for 1919..... 17,000 Appropriation for 1919..... 17,000 Estimate for 1920..... 22,000 Appropriation for 1920..... 22,000 Estimate for 1921..... 22,000 Appropriation for 1921..... 22,000 Estimate for 1922..... 25,000		
NOTE.—There is an increase in this item of \$3,000. This amount, if granted, will be divided between the work of the illustrations section and the motion picture project, which in both instances has been affected by the rising cost of chemicals used in developing films and advance in the price of printing paper, films, and practically all other supplies used in photographing and designing. The proviso, which is permanent legislation, should be omitted.		
(75) For telephone and telegraph service and freight and express charges ["\$900"] (same acts) ----- 1,200.00		
Appropriation for 1912..... \$500 Estimate for 1913..... \$500 Appropriation for 1913..... 500 Estimate for 1914..... 250 Appropriation for 1914..... 250 Estimate for 1915..... 250 Appropriation for 1915..... 250 Estimate for 1916..... 250 Appropriation for 1916..... 250 Estimate for 1917..... 250 Appropriation for 1917..... 250 Estimate for 1918..... 250 Appropriation for 1918..... 250 Estimate for 1919..... 500 Appropriation for 1919..... 500 Estimate for 1920..... 750 Appropriation for 1920..... 750 Estimate for 1921..... 900 Appropriation for 1921..... 900 Estimate for 1922..... 1,200		
NOTE.—There is an increase in this item of \$300. This small additional amount is requested in order to meet the higher rates for telephone and telegraph service and freight and express charges.		
(76) For wagons, motor trucks, bicycles, horses, harness, and maintenance of the same ["\$1,000"] (same acts) ----- 2,000.00		
Appropriation for 1912..... \$1,000 Estimate for 1913..... \$1,000 Appropriation for 1913..... 1,000 Estimate for 1914..... 500 Appropriation for 1914..... 500 Estimate for 1915..... 500 Appropriation for 1915..... 500 Estimate for 1916..... 500 Appropriation for 1916..... 500 Estimate for 1917..... 500 Appropriation for 1917..... 500 Estimate for 1918..... 500 Appropriation for 1918..... 500 Estimate for 1919..... 500 Appropriation for 1919..... 500 Estimate for 1920..... 1,000 Appropriation for 1920..... 1,000 Estimate for 1921..... 1,000 Appropriation for 1921..... 1,000 Estimate for 1922..... 2,000		
NOTE.—The increase of \$1,000 in this item is urgently needed to put in serviceable condition the two motor trucks used for delivery work by the Division of Publications, and to meet the high cost of gasoline, oil, and automobile accessories.		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Division of Publications—Continued.</i>		
(77) For purchase of manuscripts, traveling expenses, electrotypes, illustrations, and other expenses not otherwise provided for [\$4,350] (<i>act May 31, 1920, vol. 41, p. 718, sec. 1</i>) ---	\$5, 000. 00	
Appropriation for 1912..... \$3, 000 Estimate for 1913..... \$3, 000 Appropriation for 1913..... 3, 000 Estimate for 1914..... 3, 000 Appropriation for 1914..... 3, 000 Estimate for 1915..... 3, 000 Appropriation for 1915..... 3, 000 Estimate for 1916..... 3, 000 Appropriation for 1916..... 3, 000 Estimate for 1917..... 3, 000 Appropriation for 1917..... 3, 000 Estimate for 1918..... 3, 000 Appropriation for 1918..... 3, 000 Estimate for 1919..... 3, 000 Appropriation for 1919..... 3, 000 Estimate for 1920..... 4, 000 Appropriation for 1920..... 4, 000 Estimate for 1921..... 4, 350 Appropriation for 1921..... 4, 350 Estimate for 1922..... 5, 000		
NOTE.—An increase of \$650 is urgently needed to meet the advanced cost of numerous miscellaneous items incident to the general maintenance of the division.		
(78) To enable the Secretary of Agriculture to make suitable agricultural exhibits at State, interstate, and international fairs held within the United States, in cooperation with other departments of the Government; for the purchase of necessary supplies and equipment; for telephone and telegraph service, freight and express charges; for travel, and for every other expense necessary, including the employment of assistance and the payment of rent outside the city of Washington (<i>same acts</i>)-----	70, 000. 00	
(79) For extra labor and emergency employments in the District of Columbia (<i>same acts</i>)-----	17, 500. 00	
Appropriation for 1919..... \$2, 500 Estimate for 1920..... \$2, 500 Appropriation for 1920..... 2, 500 Estimate for 1921..... 2, 500 Appropriation for 1921..... 17, 500 Estimate for 1922..... 17, 500		
NOTE.—While there is apparently no change in the amount of this item, there is an actual increase of \$6,120, as two clerks of class 4, one at \$1,320, and one of class 1 are transferred to the statutory roll. With the development of the exhibits work it becomes increasingly necessary to employ temporary help during the period of preparation and exhibition, and additional funds are needed for the purpose. It is therefore believed to be inadvisable to decrease this item by the amount of the salaries of employees transferred to the statutory roll.		
In all, for general expenses-----	\$141, 700. 00	\$132, 070. 00
Appropriations for 1912..... \$30, 000 Estimates for 1913..... \$25, 000 Appropriations for 1913..... 25, 000 Estimates for 1914..... 18, 250 Appropriations for 1914..... 18, 250 Estimates for 1915..... 18, 750 Appropriations for 1915..... 18, 750 Estimates for 1916..... 18, 750 Appropriations for 1916..... 18, 750 Estimates for 1917..... 20, 250 Appropriations for 1917..... 20, 250 Estimates for 1918..... 40, 870 Appropriations for 1918..... 32, 070 Estimates for 1919..... 35, 820 Appropriations for 1919..... 35, 820 Estimates for 1920..... 44, 070 Appropriations for 1920..... 44, 070 Estimates for 1921..... 97, 350 Appropriations for 1921..... 132, 070 Estimates for 1922..... 141, 700		
NOTE.—As the objects of the appropriations are so clearly defined in the items above for general expenses, the classification of expenditures called for by section 10 of the sundry civil act of Aug. 1, 1914, is deemed unnecessary.		
<i>Statement of clerks employed in District of Columbia under lump-fund appropriations for 30 days or more during the fiscal year ended June 30, 1920 (32 Stat., p. 303).</i>		
GENERAL EXPENSES, DIVISION OF PUBLICATIONS.		
1 clerk, \$1,980 per annum.		
2 clerks, at \$1,000 each per annum.		
1 clerk, \$1,200 per annum.		
Total for Division of Publications-----	442, 560. 00	374, 090. 00

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
[BUREAU OF CROP ESTIMATES.]		
[Salaries, Bureau of Crop Estimates—]		
NOTE.—The Bureau of Crop Estimates is combined with the Bureau of Markets and the name of the latter bureau changed to "Bureau of Markets and Crop Estimates."		
<p>[One statistician, who shall be chief of bureau, \$4,000; 1 chief clerk, \$1,800; 6 clerks, class 4; 9 clerks, class 3; 15 clerks, class 2; 1 clerk, \$1,300; 40 clerks, class 1; 9 clerks, at \$1,000 each; 15 clerks, at \$900 each; 1 messenger, \$900; 3 messengers or laborers, at \$720 each; 3 messenger boys, at \$660 each; 1 messenger boy, \$600; 1 charwoman, \$540; 1 charwoman, \$360; 1 charwoman, \$240]</p>		\$130, 580. 00
NOTE.—Apparent decrease, \$130,580; actual decrease, \$126,580, as follows:		
<p style="text-align: center;"><i>Places dropped.</i></p> <p>1 clerk..... \$1, 300. 00 15 clerks, at \$900 each..... 13, 500. 00 3 messengers or laborers, at \$720 each..... 2, 160. 00 1 charwoman..... 240. 00 ----- \$17, 200. 00</p> <p><i>Transfers to statutory roll, Bureau of Markets and Crop Estimates, the statutory roll of the Bureau of Crop Estimates correspondingly reduced.</i></p> <p>1 administrative assistant..... \$1, 800. 00 6 clerks, class 4..... 10, 800. 00 9 clerks, class 3..... 14, 400. 00 15 clerks, class 2..... 21, 000. 00 40 clerks, class 1..... 48, 000. 00 9 clerks, at \$1,000 each..... 9, 000. 00 1 messenger..... 900. 00 3 messenger boys, at \$660 each..... 1, 980. 00 1 messenger boy..... 600. 00 1 charwoman..... 540. 00 1 charwoman..... 360. 00 ----- 109, 380. 00</p> <p>Actual decrease..... 126, 580. 00</p> <p><i>Transfer to new lump-fund item of the Bureau of Markets and Crop Estimates for crop estimating work, the statutory roll of the Bureau of Crop Estimates correspondingly reduced.</i></p> <p>1 statistician, who shall be chief of bureau..... 4, 000. 00 -----</p> <p>Apparent decrease..... 130, 580. 00</p>		
[General Expenses, Bureau of Crop Estimates—]		
[For all necessary expenses, in cooperation with the States Relations Service and other Federal, State, and local agencies, for collecting, compiling, abstracting, analyzing, summarizing, and interpreting data relating to agriculture; for making and publishing periodically crop and live-stock estimates, including acreage, yield, and value of farm products, as follows:]		
[Salaries and employment of labor in the city of Washington and elsewhere, supplies, telegraph and telephone service, freight and express charges, and all other necessary miscellaneous administrative expenses, \$20,000.]		
[Salaries, travel, and other necessary expenses of employees out of the city of Washington engaged in field investigations, \$168,076.]		
[In all, for general expenses]		188, 076. 00
[Total for Bureau of Crop Estimates]		318, 656. 00

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
LIBRARY, DEPARTMENT OF AGRICULTURE.		
<i>Salaries, Library, Department of Agriculture—</i>		
(1) One librarian (increase of \$1,600) (<i>R. S., p. 87, secs. 520-523; act May 31, 1920, vol. 41, p. 719, sec. 1</i>) -----	\$3, 600. 00	
NOTE.—It is proposed to increase the salary of the librarian from \$2,000 to \$3,600. The duties of this position are very exacting and have greatly increased with the growth and development of the work of the department. The present librarian is an officer of exceptional ability and long experience in the department work. Notwithstanding the fact that the library of the Department of Agriculture constitutes the largest single collection of books on agricultural subjects in the world, the salary of its librarian is far below that paid for similar responsibilities in many of the institutions throughout the country. (See also note under item 1, page 19.)		
(2) Two assistants, at \$1,920 each (<i>submitted</i>) -----	3, 840. 00	
NOTE.—These new places, and 1 assistant, \$1,800, 3 clerks, class 3, and 5 assistants, at \$1,500 each (items 3, 4, and 5), are recommended in lieu of 2 clerks, class 1, 3 clerks, at \$1,080 each, 3 clerks at \$1,020 each, 4 clerks, at \$1,000 each, 4 clerks, at \$900 each, and 1 clerk, \$840 (items 7, 8, 9, 10, 11, and 12). These changes involve a substitution of 11 places for 17, with a net increase of \$800. It is extremely difficult to secure trained library assistants at salaries of \$1,200 and below. This readjustment will permit the promotion of well-qualified employees of long training and thus insure their retention in the service.		
(3) One assistant (<i>submitted</i>) -----	1, 800. 00	
NOTE.—See note under item 2.		
(4) Four clerks, class 3 (increase of 3) (<i>R. S., p. 87, secs. 520-523; act May 31, 1920, vol. 41, p. 719, sec. 1</i>) -----	6, 400. 00	
NOTE.—See note under item 2.		
(5) Five assistants, at \$1,500 each (<i>submitted</i>) -----	7, 500. 00	
NOTE.—See note under item 2.		
(6) Two clerks, class 2 (<i>R. S., p. 87, secs. 520-523; act May 31, 1920, vol. 41, p. 719, sec. 1</i>) -----	2, 800. 00	
(7) Four clerks, class 1 (decrease of 2) (<i>same acts</i>) -----	4, 800. 00	
NOTE.—See note under item 2.		
(8) 【Three clerks, at \$1,080 each.】		
NOTE.—See note under item 2.		
(9) 【Three clerks, at \$1,020 each.】		
NOTE.—See note under item 2.		
(10) 【Four clerks, at \$1,000 each.】		
NOTE.—See note under item 2.		
(11) 【Four clerks, at \$900 each.】		
NOTE.—See note under item 2.		
(12) 【One clerk, \$840.】		
NOTE.—See note under item 2.		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>Salaries, Library, Department of Agriculture—Continued.</i>		
(13) One messenger, \$720.		
NOTE.—See note under item 14.		
(14) One messenger or laborer (<i>submitted</i>)	\$720. 00	
NOTE.—This place is substituted for 1 messenger, \$720 (item 13). It merely constitutes a change in title and is proposed in order to afford greater flexibility in filling the place in case of a vacancy.		
(15) One laborer (by transfer from lump fund, with increase of \$60) (<i>R. S., p. 87, secs. 520–523; act May 31, 1920, vol. 41, p. 719, sec. 1</i>)	660. 00	
NOTE.—An increase of \$60 is recommended in the salary of a laborer now carried on the lump fund at \$600. This employee acts as caretaker of the book shelves.		
(16) One messenger boy (<i>same acts</i>)	660. 00	
(17) Three messenger boys, at \$600 each (<i>same acts</i>)	1, 800. 00	
(18) Two charwomen, at \$480 each (<i>same acts</i>)	960. 00	
	\$35, 540. 00	\$32, 480. 00
Appropriations for 1912..... \$25,000 Estimates for 1913..... \$27,650		
Appropriations for 1913..... 25,780 Estimates for 1914..... 29,520		
Appropriations for 1914..... 27,020 Estimates for 1915..... 27,800		
Appropriations for 1915..... 27,860 Estimates for 1916..... 29,720		
Appropriations for 1916..... 29,720 Estimates for 1917..... 31,520		
Appropriations for 1917..... 31,520 Estimates for 1918..... 34,920		
Appropriations for 1918..... 32,160 Estimates for 1918..... 32,160		
Appropriations for 1919..... 32,160 Estimates for 1920..... 32,160		
Appropriations for 1920..... 32,160 Estimates for 1921..... 34,880		
Appropriations for 1921..... 32,480 Estimates for 1922..... 35,540		
NOTE.—Apparent increase, \$3,060; actual increase, \$2,460, as follows:		
Promotions.		
1 librarian, from \$2,000 to \$3,600..... \$1, 600		
1 laborer, from \$600 to \$660..... 60		
	\$1, 660	
New places.		
2 assistants, at \$1,920 each..... 3, 840		
1 assistant..... 1, 800		
3 clerks, class 3..... 4, 800		
5 assistants, at \$1,500 each..... 7, 500		
1 messenger or laborer..... 720		
	18, 660	
12	20, 320	
Places dropped.		
2 clerks, class 1..... 2, 400		
3 clerks, at \$1,080 each..... 3, 240		
3 clerks, at \$1,020 each..... 3, 060		
4 clerks, at \$1,000 each..... 4, 000		
4 clerks, at \$900 each..... 3, 600		
1 clerk..... 840		
1 messenger..... 720		
	17, 860	
18		
Actual increase..... 2, 460		
Transferred from lump fund for general expenses, which fund has been correspondingly reduced.		
1 laborer..... 600		
Apparent increase..... 3, 060		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.																																																																																																																								
<p><i>General Expenses, Library—</i></p> <p>(19) For books of reference, law books, technical and scientific books, papers and periodicals, and for expenses incurred in completing imperfect series; for the employment of additional assistants in the city of Washington and elsewhere; for official traveling expenses, and for library fixtures, library cards, supplies, and for all other necessary expenses, [\$22,000] <i>\$42,000 (act May 31, 1920, vol. 41, p. 719, sec. 1)</i> -----</p> <table><tr><td>Appropriation for 1912.....</td><td>\$15,500</td><td>Estimate for 1913.....</td><td>\$15,500</td></tr><tr><td>Appropriation for 1913.....</td><td>15,500</td><td>Estimate for 1914.....</td><td>16,500</td></tr><tr><td>Appropriation for 1914.....</td><td>16,500</td><td>Estimate for 1915.....</td><td>17,500</td></tr><tr><td>Appropriation for 1915.....</td><td>17,500</td><td>Estimate for 1916.....</td><td>17,500</td></tr><tr><td>Appropriation for 1916.....</td><td>16,390</td><td>Estimate for 1917.....</td><td>18,000</td></tr><tr><td>Appropriation for 1917.....</td><td>18,000</td><td>Estimate for 1918.....</td><td>27,000</td></tr><tr><td>Appropriation for 1918.....</td><td>18,000</td><td>Estimate for 1919.....</td><td>18,000</td></tr><tr><td>Appropriation for 1919.....</td><td>18,000</td><td>Estimate for 1920.....</td><td>18,000</td></tr><tr><td>Appropriation for 1920.....</td><td>18,000</td><td>Estimate for 1921.....</td><td>25,200</td></tr><tr><td>Appropriation for 1921.....</td><td>22,000</td><td>Estimate for 1922.....</td><td>42,000</td></tr></table> <p>NOTE.—There is an apparent increase in this item of \$20,000, but taking into consideration the transfer to the statutory roll of 1 laborer at \$600, the actual increase is \$20,600.</p> <p>This amount is recommended because of (1) the increased demand by the department and the State colleges and stations for books, periodicals, and library service, (2) increased cost of books and periodicals, (3) necessity for making up arrears in the purchase of current foreign books and periodicals which could not be imported during the war, (4) desirability of taking advantage of special opportunities for purchasing rare books and those out of print which are being placed on the market as a result of war conditions, and (5) desirability of having the library keep pace with the rapidly increasing output of scientific publications from the agricultural and scientific institutions throughout the world.</p> <table><thead><tr><th>Employees.</th><th>Rate.</th><th>Estimated, 1922.</th><th>Appropriated, 1921.</th><th>Expended, 1920.</th></tr></thead><tbody><tr><td>Salaries:</td><td></td><td><i>Number.</i></td><td><i>Number.</i></td><td><i>Number.</i></td></tr><tr><td>Scientific assistant.....per annum.....</td><td>\$1,800.00</td><td>3</td><td>1</td><td>.....</td></tr><tr><td>Scientific assistant.....do.....</td><td>1,600.00</td><td>4</td><td>1</td><td>.....</td></tr><tr><td>Scientific assistant.....do.....</td><td>1,500.00</td><td>.....</td><td>1</td><td>.....</td></tr><tr><td>Scientific assistant.....do.....</td><td>1,400.00</td><td>.....</td><td>.....</td><td>1</td></tr><tr><td>Scientific assistant.....do.....</td><td>1,200.00</td><td>.....</td><td>.....</td><td>1</td></tr><tr><td>Charwomen, \$600 to \$480.....do.....</td><td>.....</td><td>1</td><td>2</td><td>2</td></tr><tr><td>.....</td><td>.....</td><td>8</td><td>5</td><td>4</td></tr><tr><td>Salaries.....</td><td>.....</td><td>\$11,900.00</td><td>\$5,000.00</td><td>\$2,326.00</td></tr><tr><td colspan="5">OTHER OBJECTS OF EXPENDITURE.</td></tr><tr><td>Stationery.....</td><td>.....</td><td>250.00</td><td>200.00</td><td>176.48</td></tr><tr><td>Traveling expenses.....</td><td>.....</td><td>350.00</td><td>300.00</td><td>49.42</td></tr><tr><td>Equipment and material.....</td><td>.....</td><td>28,900.00</td><td>16,000.00</td><td>12,856.57</td></tr><tr><td>Miscellaneous items.....</td><td>.....</td><td>600.00</td><td>500.00</td><td>342.22</td></tr><tr><td>Total.....</td><td>.....</td><td>42,000.00</td><td>22,000.00</td><td>15,750.69</td></tr></tbody></table>	Appropriation for 1912.....	\$15,500	Estimate for 1913.....	\$15,500	Appropriation for 1913.....	15,500	Estimate for 1914.....	16,500	Appropriation for 1914.....	16,500	Estimate for 1915.....	17,500	Appropriation for 1915.....	17,500	Estimate for 1916.....	17,500	Appropriation for 1916.....	16,390	Estimate for 1917.....	18,000	Appropriation for 1917.....	18,000	Estimate for 1918.....	27,000	Appropriation for 1918.....	18,000	Estimate for 1919.....	18,000	Appropriation for 1919.....	18,000	Estimate for 1920.....	18,000	Appropriation for 1920.....	18,000	Estimate for 1921.....	25,200	Appropriation for 1921.....	22,000	Estimate for 1922.....	42,000	Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.	Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>	Scientific assistant.....per annum.....	\$1,800.00	3	1	Scientific assistant.....do.....	1,600.00	4	1	Scientific assistant.....do.....	1,500.00	1	Scientific assistant.....do.....	1,400.00	1	Scientific assistant.....do.....	1,200.00	1	Charwomen, \$600 to \$480.....do.....	1	2	2	8	5	4	Salaries.....	\$11,900.00	\$5,000.00	\$2,326.00	OTHER OBJECTS OF EXPENDITURE.					Stationery.....	250.00	200.00	176.48	Traveling expenses.....	350.00	300.00	49.42	Equipment and material.....	28,900.00	16,000.00	12,856.57	Miscellaneous items.....	600.00	500.00	342.22	Total.....	42,000.00	22,000.00	15,750.69	\$42, 000. 00	\$22, 000. 00
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Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.		
MISCELLANEOUS EXPENSES.				
Miscellaneous Expenses, Department of Agriculture—				
For stationery, blank books, twine, paper, gum, dry goods, soap, brushes, brooms, mats, oils, paints, glass, lumber, hardware, ice, fuel, water and gas pipes, heating apparatus, furniture, carpets, and mattings; for lights, freight, express charges, advertising, telegraphing, telephoning, postage, washing towels, and necessary repairs and improvements to buildings and heating apparatus; for the purchase, subsistence, and care of horses and the purchase and repair of harness and vehicles, for official purposes only; for the payment of duties on imported articles, and the Department of Agriculture's proportionate share of the expense of the dispatch agent in New York; for official traveling expenses; and for other miscellaneous supplies and expenses not otherwise provided for, and necessary for the practical and efficient work of the department, [\$136,000] \$201,000 (act May 31, 1920, vol. 41, p. 719, sec. 1) -----	\$201, 000. 00	\$136, 000. 00		
Appropriation for 1912..... \$110,000	Estimate for 1913..... \$96,066			
Appropriation for 1913..... 106,066	Estimate for 1914..... 106,066			
Appropriation for 1914..... 106,066	Estimate for 1915..... 110,000			
Appropriation for 1915..... 110,000	Estimate for 1916..... 115,000			
Appropriation for 1916..... 115,000	Estimate for 1917..... 115,000			
Appropriation for 1917..... 122,500	Estimate for 1918..... 122,500			
Appropriation for 1918..... 137,500	Estimate for 1919..... 137,500			
Appropriation for 1919..... 142,500	Estimate for 1920..... 142,500			
Appropriation for 1920..... 175,500	Estimate for 1921..... 141,000			
Appropriation for 1921..... 136,000	Estimate for 1922..... 201,000			
NOTE.—There is an increase in this item of \$65,000, which is required for the following purposes:				
(a) \$30,000 for increased cost of coal for the fiscal year 1922. The department now consumes approximately 8,000 tons of coal per annum, at a cost of \$8.06 per ton. It is impossible to estimate the price for next year, on account of uncertainty as to first cost at the mines and cost of freight and delivery, but it is believed that this additional amount will safeguard the department on its coal supply.				
(b) \$10,000 for extending coal bunkers. The present bunkers will carry only three days' supply of coal during severe weather. Heretofore coal in excess of three tons has had to be dumped on the lawn near the power house, and even under these conditions only 10 days' supply can be maintained. Enlarging the present coal bunkers by an underground extension will enable the department to accept and store a larger supply of coal. If this increase is allowed the storage capacity can be increased to accommodate 400 tons of coal.				
(c) \$10,000 to replace the steam line from the power plant to the greenhouses, which is practically worn out and causes loss of heat in transmission.				
(d) \$15,000 for the purchase and installation of a new boiler in the power plant. Two old Scotch marine boilers, installed about 10 years ago, are worn out. They are uneconomical in consumption of coal and are believed to be dangerous. The installation of one new boiler to replace these two worn-out boilers will result in a saving of coal and eliminate the risk of accident.				
Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.
Salaries:		Number.	Number.	Number.
United States dispatch agent.. per annum..	\$600.00	1	1	1
Wages:				
Superintendent of construction, carpenters, steamfitters and steamfitters' helpers, temporary—\$10 to \$3..... per diem..		15		10
Miscellaneous temporary labor—\$4 to \$3.50..... do.....		10		8
		26	1	19
Salaries.....		\$600.00	\$600.00	\$600.00
Wages.....		5,000.00		2,908.50
OTHER OBJECTS OF EXPENDITURE.				
Stationery.....		18,000.00	18,400.00	19,387.12
Traveling expenses.....		2,400.00	2,000.00	2,580.36
Equipment and material.....		110,000.00	80,000.00	79,810.66
Telephone and telegraph service.....		9,000.00	9,000.00	8,623.21
Miscellaneous items.....		56,000.00	26,000.00	57,263.77
Total.....		201,000.00	136,000.00	171,173.62

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.						Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>Miscellaneous Expenses, Department of Agriculture—Continued.</i>							
<i>Statement of proposed expenditures from the appropriation for miscellaneous expenses, Department of Agriculture, for the fiscal year ending June 30, 1922, for the maintenance, repair, and operation of horse-drawn passenger-carrying vehicles, as required by sec. 5 of the act of July 16, 1914 (38 Stat., p. 508).</i>							
Office.	Horse-drawn or motor-propelled.	Appropriation.	For maintenance, repair, and operation.			Public purposes for which intended.	Officials and employees by whom used.
			Num-ber.	Descrip-tion.	Amount.		
Secretary's office	Horse-drawn	Miscellaneous expenses, Department of Agriculture.	1 1 1 2	Brougham . Surrey Victoria Carriages . . .	\$800	Personal transportation on official business.	Secretary and Acting Secretary of Agriculture, Washington, D. C.

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.																																																																																						
<div>RENT IN THE DISTRICT OF COLUMBIA.</div> <div>Rent of Buildings, Department of Agriculture—</div> <div>For rent of buildings and parts of buildings in the District of Columbia, for use of the various bureaus, divisions, and offices of the Department of Agriculture, \$164,666: <i>Provided, That only such part of this sum shall be available to pay rent for space which can not be furnished by the Public Buildings Commission in Government buildings located in the District of Columbia (act May 31, 1920, vol. 41, p. 719, sec. 1)</i> -----</div> <div><table><tr><td>Appropriation for 1913.....</td><td>\$95,329</td><td>Estimate for 1914.....</td><td>\$95,329</td></tr><tr><td>Appropriation for 1914.....</td><td>98,329</td><td>Estimate for 1915.....</td><td>115,829</td></tr><tr><td>Appropriation for 1915.....</td><td>108,329</td><td>Estimate for 1916.....</td><td>123,689</td></tr><tr><td>Appropriation for 1916.....</td><td>123,689</td><td>Estimate for 1917.....</td><td>123,689</td></tr><tr><td>Appropriation for 1917.....</td><td>123,689</td><td>Estimate for 1918.....</td><td>143,689</td></tr><tr><td>Appropriation for 1918.....</td><td>143,689</td><td>Estimate for 1919.....</td><td>158,689</td></tr><tr><td>Appropriation for 1919.....</td><td>158,689</td><td>Estimate for 1920.....</td><td>158,689</td></tr><tr><td>Appropriation for 1920.....</td><td>100,000</td><td>Estimate for 1921.....</td><td>150,000</td></tr><tr><td>Appropriation for 1921.....</td><td>164,666</td><td>Estimate for 1922.....</td><td>164,666</td></tr></table></div> <div><table><tr><th>Other objects of expenditure.</th><th>Estimated, 1922.</th><th>Appropriated, 1921.</th><th>Expended, 1920.</th></tr><tr><td>Rent of buildings.....</td><td>\$164,666.00</td><td>\$164,666.00</td><td>\$140,712.10</td></tr></table></div> <div>Statement showing estimated amounts that will be paid from the above appropriation during the fiscal year 1921 for quarters to be occupied by the various branches of the department (38 Stat., p. 1108).</div> <div><table><tr><td>Bureau of Markets.....</td><td>\$24,191.00</td></tr><tr><td>Library, Department of Agriculture.....</td><td>5,512.00</td></tr><tr><td>Bureau of Biological Survey.....</td><td>4,199.00</td></tr><tr><td>Division of Publications.....</td><td>7,585.00</td></tr><tr><td>Bureau of Plant Industry.....</td><td>24,418.75</td></tr><tr><td>Bureau of Crop Estimates.....</td><td>1,583.00</td></tr><tr><td>States Relations Service.....</td><td>16,029.00</td></tr><tr><td>Forest Service.....</td><td>23,190.00</td></tr><tr><td>Bureau of Chemistry.....</td><td>19,660.00</td></tr><tr><td>Bureau of Animal Industry.....</td><td>15,965.25</td></tr><tr><td>Bureau of Soils.....</td><td>585.00</td></tr><tr><td>Bureau of Public Roads.....</td><td>10,700.00</td></tr><tr><td>Office of the Solicitor.....</td><td>3,000.00</td></tr><tr><td>Insecticide and Fungicide Board.....</td><td>2,650.00</td></tr><tr><td>Federal Horticultural Board.....</td><td>240.00</td></tr><tr><td>Office of the Secretary.....</td><td>359.00</td></tr><tr><td>Office of Farm Management.....</td><td>3,225.00</td></tr><tr><td>Weather Bureau.....</td><td>500.00</td></tr><tr><td>Emergency Rentals.....</td><td>1,074.00</td></tr><tr><td>Total.....</td><td>164,666.00</td></tr></table></div>			Appropriation for 1913.....	\$95,329	Estimate for 1914.....	\$95,329	Appropriation for 1914.....	98,329	Estimate for 1915.....	115,829	Appropriation for 1915.....	108,329	Estimate for 1916.....	123,689	Appropriation for 1916.....	123,689	Estimate for 1917.....	123,689	Appropriation for 1917.....	123,689	Estimate for 1918.....	143,689	Appropriation for 1918.....	143,689	Estimate for 1919.....	158,689	Appropriation for 1919.....	158,689	Estimate for 1920.....	158,689	Appropriation for 1920.....	100,000	Estimate for 1921.....	150,000	Appropriation for 1921.....	164,666	Estimate for 1922.....	164,666	Other objects of expenditure.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.	Rent of buildings.....	\$164,666.00	\$164,666.00	\$140,712.10	Bureau of Markets.....	\$24,191.00	Library, Department of Agriculture.....	5,512.00	Bureau of Biological Survey.....	4,199.00	Division of Publications.....	7,585.00	Bureau of Plant Industry.....	24,418.75	Bureau of Crop Estimates.....	1,583.00	States Relations Service.....	16,029.00	Forest Service.....	23,190.00	Bureau of Chemistry.....	19,660.00	Bureau of Animal Industry.....	15,965.25	Bureau of Soils.....	585.00	Bureau of Public Roads.....	10,700.00	Office of the Solicitor.....	3,000.00	Insecticide and Fungicide Board.....	2,650.00	Federal Horticultural Board.....	240.00	Office of the Secretary.....	359.00	Office of Farm Management.....	3,225.00	Weather Bureau.....	500.00	Emergency Rentals.....	1,074.00	Total.....	164,666.00	\$164,666.00	\$164,666.00
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NOTE.—For statement of buildings and parts of buildings rented by the Department of Agriculture in the District of Columbia, and statement of Government-owned buildings used by the Department of Agriculture in the District of Columbia, see page 314.

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
STATES RELATIONS SERVICE.		
<i>Salaries, States Relations Service—</i>		
(1) One director (increase of \$3,000) (<i>R. S., p. 87, secs. 520-523; act May 31, 1920, vol. 41, pp. 719, 720, sec. 1</i>)-----	\$7, 500. 00	
NOTE.—An increase of \$3,000 in the salary of the director is recommended. See note under item 1, page 19.		
(2) 【One chief clerk, \$2,000.】		
NOTE.—See note under item 5.		
(3) One administrative assistant (<i>submitted</i>)-----	3, 000. 00	
NOTE.—This new place is submitted in lieu of 1 clerk or chief accountant, \$2,400 (item 4), with increase of \$600. The present salary of this position is considered inadequate in view of the responsibilities involved in the supervision of the fiscal matters of the service, which requires long experience in accounting, special knowledge of Government regulations and appropriation laws, and thorough familiarity with the decisions of the Comptroller of the Treasury. The present incumbent has been in the department 20 years.		
(4) 【One clerk or chief accountant, \$2,400.】		
NOTE.—See note under item 3.		
(5) One administrative assistant (<i>submitted</i>)-----	2, 500. 00	
NOTE.—This new place is recommended in lieu of 1 chief clerk, at \$2,000 (item 2). The salary of this position has remained stationary for over 10 years, since which time the duties and responsibilities of the office have steadily grown, as indicated by an increase in the total force of the bureau from 200 to over 4,100. The present incumbent has been in the service 20 years. The change in designation is recommended in order to afford greater latitude in filling the place in case it becomes vacant.		
(6) 【One financial clerk, \$2,000.】		
NOTE.—See note under item 7.		
(7) One executive assistant (<i>submitted</i>)-----	2, 000. 00	
NOTE.—This new place is submitted in lieu of one financial clerk at the same salary (item 6). The employee occupying this position is the property clerk of the bureau, and the title recommended more properly describes his duties. This change will also make it possible to utilize the position to greater advantage in the event of a vacancy.		
(8) One clerk (<i>R. S., p. 87, secs. 520-523; act May 31, 1920, vol. 41, pp. 719, 720, sec. 1</i>)-----	1, 980. 00	
(9) One clerk or proof reader (<i>same acts</i>)-----	1, 800. 00	
(10) Six clerks, class 4 (increase of 1) (<i>same acts</i>)-----	10, 800. 00	
NOTE.—This additional place and 6 new places for clerks of class 2, as well as certain positions transferred from the several lump-fund rolls without a corresponding reduction therein, namely, 9 clerks, class 2, 4 clerks, class 1, 1 clerk or machine operator, \$1,400, 1 messenger or laborer, \$720, and 2 charwomen, at \$240 each (items 12, 14, 17, 19, 27, and 34) are submitted in lieu of 3 clerks, at \$1,100 each, 28 clerks, at \$1,000 each, 3 clerks, at \$900 each, 1 messenger boy, \$480, and 1 skilled laborer, \$900 (items 21, 22, 23, 31, and 32). This readjustment involves the addition of 25 new places, with salaries aggregating \$31,800, and the elimination of 36 places, carrying a total of \$35,380; a reduction of 11 in the number of places and \$3,580 in the amount. The places for 1 clerk, class 4, and 6 clerks, class 2, are new, and will be filled by promotion, in accordance with the standing of present employees on the efficiency register. It is the intention to fill the remaining places by transfer from lump-fund rolls.		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>Salaries, States Relations Service—Continued.</i>		
(11) One executive clerk (<i>R. S., p. 87, secs. 520-523; act May 31, 1920, vol. 41, pp. 719, 720, sec. 1</i>)	\$1, 740. 00	
(12) Twelve clerks, class 3 (increase of 1 by transfer from lump fund) (<i>same acts</i>)	19, 200. 00	
NOTE.—See note under item 10.		
(13) Two clerks, at \$1,500 each (<i>same acts</i>)	3, 000. 00	
(14) Thirty-two clerks, class 2 (increase of 15, 9 by transfer from lump fund, and 6 new places) (<i>same acts</i>)	44, 800. 00	
NOTE.—See note under item 10.		
(15) Two clerks, at \$1,320 each (<i>same acts</i>)	2, 640. 00	
(16) One clerk (<i>same acts</i>)	1, 260. 00	
(17) Fifty-six clerks, class 1 (increase of 4 by transfer from lump fund) (<i>same acts</i>)	67, 200. 00	
NOTE.—See note under item 10.		
(18) One clerk or artist-draftsman (<i>same acts</i>)	1, 200. 00	
(19) One clerk or machine operator (by transfer from lump fund) (<i>same acts</i>)	1, 400. 00	
NOTE.—See note under item 10.		
(20) One clerk or machine operator (<i>same acts</i>)	1, 200. 00	
(21) Twenty-four clerks, at \$1,100 each (decrease of 3) (<i>same acts</i>) ..	26, 400. 00	
NOTE.—See note under item 10.		
(22) Eight clerks, at \$1,000 each (decrease of 31) (<i>same acts</i>)	8, 000. 00	
NOTE.—See notes under items 10 and 24.		
(23) Three clerks, at \$900 each (decrease of 3) (<i>same acts</i>)	2, 700. 00	
NOTE.—See note under item 10.		
(24) One messenger (<i>submitted</i>)	1, 000. 00	
NOTE.—This new place and the 2 skilled laborers, at \$1,000 each (item 25), are submitted in lieu of 3 clerks, at \$1,000 each (item 22). With the approval of the Civil Service Commission, these places are now being used for employees of the classes indicated, with the understanding that steps would be taken in connection with the estimates for 1922 to have the titles changed to accord more closely with the duties performed.		
(25) Two skilled laborers, at \$1,000 each (<i>submitted</i>)	2, 000. 00	
NOTE.—See note under item 24.		
(26) Two messengers or laborers, at \$840 each (<i>R. S., p. 87, secs. 520-523; act May 31, 1920, vol. 41, pp. 719, 720, sec. 1</i>) ..	1, 680. 00	
(27) Six messengers or laborers, at \$720 each (increase of 1 by transfer from lump fund) (<i>same acts</i>)	4, 320. 00	
NOTE.—See note under item 10.		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes and estimated amount required for each detailed object.		Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.																																								
<i>Salaries, States Relations Service—Continued.</i>																																											
(28)	Two messengers or laborers, at \$600 each (<i>R. S., p. 87, secs. 520-523; act May 31, 1920, vol. 41, pp. 719, 720, sec. 1</i>) ..	\$1, 200. 00																																									
(29)	One messenger or laborer (<i>same acts</i>)	480. 00																																									
(30)	Four messenger boys, at \$600 each (<i>same acts</i>)	2, 400. 00																																									
(31)	Twelve messenger boys, at \$480 each (decrease of 1) (<i>same acts</i>)	5, 760. 00																																									
NOTE.—See note under item 10.																																											
(32)	【One skilled laborer, \$900.】																																										
NOTE.—See note under item 10.																																											
(33)	Four charwomen, at \$480 each (<i>same acts</i>)	1, 920. 00																																									
(34)	Eighteen charwomen, at \$240 each (increase of 2 by transfer from lump fund) (<i>same acts</i>)	4, 320. 00																																									
NOTE.—See note under item 10.		\$235, 400. 00	\$234, 880. 00																																								
<table> <tr> <td>Appropriations for 1912.....</td><td>\$56, 500</td><td>Estimates for 1913.....</td><td>\$59, 840</td></tr> <tr> <td>Appropriations for 1913.....</td><td>58, 240</td><td>Estimates for 1914.....</td><td>66, 740</td></tr> <tr> <td>Appropriations for 1914.....</td><td>66, 160</td><td>Estimates for 1915.....</td><td>68, 840</td></tr> <tr> <td>Appropriations for 1915.....</td><td>68, 840</td><td>Estimates for 1916.....</td><td>103, 140</td></tr> <tr> <td>Appropriations for 1916.....</td><td>103, 140</td><td>Estimates for 1917.....</td><td>127, 700</td></tr> <tr> <td>Appropriations for 1917.....</td><td>127, 540</td><td>Estimates for 1918.....</td><td>137, 740</td></tr> <tr> <td>Appropriations for 1918.....</td><td>135, 080</td><td>Estimates for 1919.....</td><td>180, 980</td></tr> <tr> <td>Appropriations for 1919.....</td><td>180, 980</td><td>Estimates for 1920.....</td><td>203, 840</td></tr> <tr> <td>Appropriations for 1920.....</td><td>203, 840</td><td>Estimates for 1921.....</td><td>263, 260</td></tr> <tr> <td>Appropriations for 1921.....</td><td>234, 880</td><td>Estimates for 1922.....</td><td>255, 400</td></tr> </table>		Appropriations for 1912.....	\$56, 500	Estimates for 1913.....	\$59, 840	Appropriations for 1913.....	58, 240	Estimates for 1914.....	66, 740	Appropriations for 1914.....	66, 160	Estimates for 1915.....	68, 840	Appropriations for 1915.....	68, 840	Estimates for 1916.....	103, 140	Appropriations for 1916.....	103, 140	Estimates for 1917.....	127, 700	Appropriations for 1917.....	127, 540	Estimates for 1918.....	137, 740	Appropriations for 1918.....	135, 080	Estimates for 1919.....	180, 980	Appropriations for 1919.....	180, 980	Estimates for 1920.....	203, 840	Appropriations for 1920.....	203, 840	Estimates for 1921.....	263, 260	Appropriations for 1921.....	234, 880	Estimates for 1922.....	255, 400		
Appropriations for 1912.....	\$56, 500	Estimates for 1913.....	\$59, 840																																								
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Appropriations for 1921.....	234, 880	Estimates for 1922.....	255, 400																																								
NOTE.—Apparent increase, \$520; actual increase, \$520, as follows:																																											
<i>Promotion.</i>																																											
1 director from \$4,500 to \$7,500.....		\$3, 000																																									
<i>New places.</i>																																											
1 administrative assistant.....		\$3, 000																																									
1 administrative assistant.....		2, 500																																									
1 executive assistant.....		2, 000																																									
1 clerk, class 4.....		1, 800																																									
6 clerks, class 2.....		8, 400																																									
1 messenger.....		1, 000																																									
2 skilled laborers, at \$1,000 each.....		2, 000																																									
		20, 700																																									
<i>Transfers from lump funds which funds have not been correspondingly reduced.</i>																																											
1 clerk, class 3.....		1, 600																																									
9 clerks, class 2.....		12, 600																																									
4 clerks, class 1.....		4, 800																																									
1 clerk or machine operator.....		1, 400																																									
1 messenger or laborer.....		720																																									
2 charwomen, at \$240 each.....		480																																									
		21, 600																																									
		45, 300																																									
<i>Places dropped.</i>																																											
1 chief clerk.....		\$2, 000																																									
1 clerk or chief accountant.....		2, 400																																									
1 financial clerk.....		2, 000																																									
3 clerks, at \$1,100 each.....		3, 300																																									
31 clerks, at \$1,000 each.....		31, 000																																									
3 clerks, at \$900 each.....		2, 700																																									
1 skilled laborer.....		900																																									
1 messenger boy.....		480																																									
		44, 780																																									
Increase.....		520																																									

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, States Relations Service—</i>		
(35) To carry into effect the provisions of an act approved March 2, 1887, entitled "An act to establish agricultural experiment stations in connection with the colleges established in the several States under the provisions of an act approved July 2, 1862, and of the acts supplementary thereto," the sums apportioned to the several States and Territories, to be paid quarterly in advance (<i>acts July 2, 1862, vol. 12, p. 503, sec. 1; Mar. 2, 1887, vol. 24, p. 440, secs. 1-10; May 31, 1920, vol. 41, p. 720, sec. 1</i>) -----	\$720, 000. 00	
(36) To carry into effect the provisions of an act approved March 16, 1906, entitled "An act to provide for an increased annual appropriation for agricultural experiment stations and regulating the expenditure thereof," the sums apportioned to the several States and Territories, to be paid quarterly in advance, \$720,000: <i>Provided</i> , That not to exceed \$15,000 shall be paid to each State and Territory under this act (<i>acts Mar. 16, 1906, vol. 34, p. 63, secs. 2, 3; May 31, 1920, vol. 41, p. 720, sec. 1</i>) -----	720, 000. 00	
Appropriation for 1912.....\$1, 440, 000 Appropriation for 1913.....1, 440, 000 Appropriation for 1914.....1, 440, 000 Appropriation for 1915.....1, 440, 000 Appropriation for 1916.....1, 440, 000 Appropriation for 1917.....1, 440, 000 Appropriation for 1918.....1, 440, 000 Appropriation for 1919.....1, 440, 000 Appropriation for 1920.....1, 440, 000 Appropriation for 1921.....1, 440, 000	Estimate for 1913.....\$1, 440, 000 Estimate for 1914.....1, 440, 000 Estimate for 1915.....1, 440, 000 Estimate for 1916.....1, 440, 000 Estimate for 1917.....1, 440, 000 Estimate for 1918.....1, 440, 000 Estimate for 1919.....1, 440, 000 Estimate for 1920.....1, 440, 000 Estimate for 1921.....1, 440, 000 Estimate for 1922.....1, 440, 000	
(37) To enable the Secretary of Agriculture to enforce the provisions of the above acts and the act approved May 8, 1914, entitled "An act to provide for cooperative agricultural extension work between the agricultural colleges in the several States receiving the benefits of an act of Congress approved July 2, 1862, and of acts supplementary thereto, and the United States Department of Agriculture," relative to their administration and for the administration of agricultural experiment stations in Alaska, Hawaii, Porto Rico, the island of Guam, and the Virgin Islands of the United States, including the employment of clerks, assistants, and other persons in the city of Washington and elsewhere, freight and express charges, official traveling expenses, office fixtures, supplies, apparatus, telegraph and telephone service, gas, electric current, and rent outside of the District of Columbia, [\$61,500] \$81,500; and the Secretary of Agriculture shall prescribe the form of the annual financial statement required under the above acts, ascertain whether the expenditures are in accordance with their provisions, coordinate the work of the Department of Agriculture with that of the State agricultural colleges and experiment stations in the lines authorized in said acts, and make report thereon to Congress (<i>acts July 2, 1862, vol. 12, p. 503, sec. 1; Mar. 2, 1887, vol. 24, p. 440, secs. 1-10; Mar. 16, 1906, vol. 34, p. 63, secs. 2, 3; May 8, 1914, vol. 38, pp. 372-374, sec. 1; May 31, 1920, vol. 41, p. 720, sec. 1</i>) -----	\$1, 500. 00	
Appropriation for 1912.....\$37, 500 Appropriation for 1913.....38, 400 Appropriation for 1914.....40, 500 Appropriation for 1915.....50, 500 Appropriation for 1916.....59, 500 Appropriation for 1917.....58, 500 Appropriation for 1918.....68, 500 Appropriation for 1919.....68, 500 Appropriation for 1920.....69, 600 Appropriation for 1921.....61, 500	Estimate for 1913.....\$38, 400 Estimate for 1914.....42, 500 Estimate for 1915.....42, 255 Estimate for 1916.....59, 500 Estimate for 1917.....74, 750 Estimate for 1918.....68, 500 Estimate for 1919.....68, 500 Estimate for 1920.....74, 600 Estimate for 1921.....71, 500 Estimate for 1922.....81, 500	

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
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General Expenses, States Relations Service—Continued.

NOTE.—There is an increase in this item of \$20,000. Of this amount \$10,000 is needed in connection with the Federal activities connected with the administration of the Smith-Lever Act and \$10,000 for carrying out the Federal laws relating to the State agricultural colleges and experiment stations and for the administration of the department's insular experiment stations. Federal and State Smith-Lever funds will be augmented next year by \$1,000,000, which will necessarily increase the volume of inspection of college extension work, accounts, preparation of reports, etc. Provision also should be made to meet the increased cost of travel, equipment, supplies, etc., in connection with the inspection of the work and expenditures under the Hatch and Adams Acts and the experimental work at the outlying stations of the department in Alaska, Hawaii, Guam, Porto Rico, and the Virgin Islands.

Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.
		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>
Salaries:				
Agriculturist and chief.....per annum..	\$4,500.00	1	1	
Agriculturist and chief.....do.....	4,260.00			1
Agriculturist and assistant chief.....do.....	3,750.00			1
Agriculturist.....do.....	3,500.00	4	4	5
Agriculturist.....do.....	2,700.00	1	1	2
Specialist.....do.....	4,000.00	1	1	
Specialist.....do.....	3,600.00	1	1	
Specialist.....do.....	3,500.00			1
Specialist.....do.....	3,000.00	1		1
Agricultural physicist.....do.....	4,000.00	1	1	
Scientific assistant.....do.....	3,300.00	1	1	
Scientific assistant.....do.....	3,000.00	5	5	
Scientific assistant.....do.....	2,640.00			1
Scientific assistant.....do.....	2,580.00			1
Scientific assistant.....do.....	2,520.00	1	1	4
Scientific assistant.....do.....	2,460.00	1		
Scientific assistant.....do.....	2,400.00	1	1	
Scientific assistant.....do.....	2,280.00	3	3	
Scientific assistant.....do.....	2,220.00			1
Scientific assistant.....do.....	2,160.00	1		
Scientific assistant.....do.....	2,100.00			1
Scientific assistant.....do.....	1,980.00	2	2	
Scientific assistant.....do.....	1,800.00	1	1	4
Scientific assistant.....do.....	1,740.00			1
Scientific assistant.....do.....	1,500.00			2
Scientific assistant.....do.....	1,400.00	1	1	1
Clerks, temporary—				
\$1,400 to \$1,000.....do.....		4	3	16
Wages:				
Miscellaneous temporary labor—				
\$6 to \$3.36.....per diem..		3		
		34	26	43
Salaries.....		\$72,250.00	\$58,500.00	\$60,585.02
Wages.....		1,000.00		
OTHER OBJECTS OF EXPENDITURE.				
Traveling expenses.....		5,000.00	2,500.00	5,238.03
Miscellaneous items.....		3,250.00	500.00	202.92
Total.....		81,500.00	61,500.00	66,025.97

- (38) For farmers' cooperative demonstration work outside of the cotton belt, including the employment of labor in the city of Washington and elsewhere, supplies, and all other necessary expenses (*acts July 2, 1862, vol. 12, p. 503, sec. 1; Mar. 2, 1887, vol. 24, p. 440, secs. 1-10; Mar. 16, 1906, vol. 34, p. 63, secs. 2, 3; May 8, 1914, vol. 38, pp. 372-374, sec. 1; May 31, 1920, vol. 41, p. 720, sec. 1*)\$715,720.00

Appropriation for 1912.....	\$142,920	Estimate for 1913.....	\$186,020
Appropriation for 1913.....	300,000	Estimate for 1914.....	435,700
Appropriation for 1914.....	375,000	Estimate for 1915.....	365,520
Appropriation for 1915.....	400,000	Estimate for 1916.....	386,080
Appropriation for 1916.....	386,080	Estimate for 1917.....	378,240
Appropriation for 1917.....	478,240	Estimate for 1918.....	578,240
Appropriation for 1918.....	578,240	Estimate for 1919.....	554,800
Appropriation for 1919.....	554,800	Estimate for 1920.....	551,280
Appropriation for 1920.....	751,280	Estimate for 1921.....	715,720
Appropriation for 1921.....	715,720	Estimate for 1922.....	715,720

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.					Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, States Relations Service—Continued.</i>						
Employees.	Rate.	Esti- mated, 1922.	Appro- priated, 1921.	Ex- pended, 1920.		
Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>		
Agriculturist and chief.....per annum..	\$4,500.00	1	1			
Agriculturist and chief.....do.....	4,000.00			1		
Agriculturist.....do.....	4,000.00	2	2			
Agriculturist.....do.....	3,600.00	2	2	1		
Agriculturist.....do.....	3,500.00	1		1		
Agriculturist.....do.....	3,300.00	2	2	2		
Agriculturist.....do.....	3,240.00			1		
Agriculturist.....do.....	3,000.00	11	4	2		
Agriculturist.....do.....	2,880.00	1	1			
Agriculturist.....do.....	2,700.00			2		
Agriculturist.....do.....	2,580.00			1		
Agriculturist.....do.....	2,520.00			1		
Agriculturist.....do.....	2,400.00			1		
Specialist.....do.....	3,600.00	2	2			
Specialist.....do.....	3,240.00			1		
Specialist.....do.....	3,000.00	3	3	2		
Specialist.....do.....	2,940.00		1	1		
Specialist.....do.....	2,760.00			1		
Specialist.....do.....	2,400.00	2	2	5		
Specialist.....do.....	2,220.00	1	1	2		
Scientific assistant.....do.....	3,000.00	1	1	1		
Scientific assistant.....do.....	2,460.00		1	1		
Scientific assistant.....do.....	2,400.00			2		
Scientific assistant.....do.....	1,800.00			1		
Artist draftsman.....do.....	1,400.00	1	1	1		
Agent.....do.....	1,500.00	14	111	107		
Agent.....do.....	1,404.00		1	1		
Agent.....do.....	1,308.00			1		
Agent.....do.....	1,200.00	100	73			
Agent.....do.....	1,188.00		1	1		
Agent.....do.....	1,080.00		1	3		
Agent.....do.....	1,056.00		1			
Agriculturists, scientific assistants, agents, and collaborators, \$996 to \$1,000.....do.....		2,100	2,060	1,609		
Clerk, temporary.....do.....	2,520.00		1	1		
Clerk.....do.....	2,000.00	1	1	1		
Clerk, temporary, \$1,800 to \$1,000.....do.....		8	6	114		
Clerks and messengers, \$900 to \$480.....do.....		3	1	2		
Wages:						
Painters, temporary.....per diem..	5.25	3	3	3		
Firemen and laborers, \$1,080 to \$240.....per annum..				5		
		2,252	2,284	1,878		
Salaries.....		\$628,000.00	\$628,800.00	\$603,143.89		
Wages.....		1,000.00	1,000.00	1,287.48		
OTHER OBJECTS OF EXPENDITURE.						
Stationery.....		25,000.00	25,000.00	40,346.56		
Traveling expenses.....		50,000.00	50,000.00	43,388.17		
Miscellaneous items.....		11,720.00	10,920.00	12,691.31		
Total.....		715,720.00	715,720.00	706,857.41		

- (39) For farmers' cooperative demonstrations and for the study and demonstration of the best methods of meeting the ravages of the cotton-boll weevil, including the employment of labor in the city of Washington and elsewhere, supplies, and all other necessary expenses, \$634,800: *Provided*, That the expense of such service shall be defrayed from this appropriation and such cooperative funds as may be voluntarily contributed by State, county, and municipal agencies, associations of farmers, and individual farmers, universities, colleges, boards of trade, chambers of commerce, other local associations of business men, business organizations, and individuals within the State (acts July 2, 1862, vol. 12, p. 503, sec. 1; Mar. 2, 1887, vol. 24, p. 440, secs. 1-10; Mar. 16, 1906, vol. 34, p. 63, secs. 2, 3; May 8, 1914, vol. 38, pp. 372-374, sec. 1; May 31, 1920, vol. 41, p. 720, sec. 1) ----- \$634,800.00

Appropriation for 1912.....	\$350,000	Estimate for 1913.....	\$332,960
Appropriation for 1913.....	332,960	Estimate for 1914.....	407,960
Appropriation for 1914.....	375,000	Estimate for 1915.....	378,240
Appropriation for 1915.....	673,240	Estimate for 1916.....	666,020
Appropriation for 1916.....	666,020	Estimate for 1917.....	661,300
Appropriation for 1917.....	661,300	Estimate for 1918.....	659,560
Appropriation for 1918.....	659,560	Estimate for 1919.....	650,140
Appropriation for 1919.....	650,140	Estimate for 1920.....	645,040
Appropriation for 1920.....	645,040	Estimate for 1921.....	634,800
Appropriation for 1921.....	634,800	Estimate for 1922.....	634,800

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
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General Expenses, States Relations Service—Continued.

Employees.	Rate.	Esti- mated, 1922.	Appro- priated, 1921.	Ex- pended, 1920.
		Number.	Number.	Number.
Salaries:				
Agriculturist and chief.....per annum..	\$4,500.00	1	1	
Agriculturist and chief.....do.....	4,200.00			1
Agriculturist and assistant chief.....do.....	4,000.00			1
Agriculturist and assistant chief.....do.....	3,500.00	1	1	1
Agriculturist.....do.....	3,600.00	1	1	
Agriculturist.....do.....	3,500.00	3	3	3
Agriculturist.....do.....	3,250.00	1	1	2
Specialist.....do.....	3,000.00	2	2	2
Specialist.....do.....	2,520.00	1	1	1
Specialist.....do.....	2,400.00	2	2	2
Specialist.....do.....	2,280.00			1
Specialist.....do.....	2,220.00			1
Scientific assistant.....do.....	3,000.00	1	1	1
Scientific assistant.....do.....	2,460.00			1
Scientific assistant.....do.....	2,400.00	1	1	
Scientific assistant.....do.....	2,160.00			1
Agent.....do.....	2,400.00	2	2	2
Agent.....do.....	2,100.00	1	1	1
Agent.....do.....	2,000.00			1
Agent.....do.....	1,620.00			1
Agent.....do.....	1,500.00			2
Agent.....do.....	1,404.00			1
Agent.....do.....	1,200.00	40	37	80
Agents and collaborators, \$996 to \$1.....do.....		1,915	1,913	1,853
Clerk.....do.....	2,400.00	1	1	1
Clerk.....do.....	2,220.00	1	1	1
Clerk.....do.....	1,800.00			2
Clerk.....do.....	1,400.00	2	5	6
Clerks, temporary, \$1,200 to \$1,000.....do.....			1	39
Wages:				
Mechanic.....do.....	1,600.00		1	
Engincer.....do.....	1,100.00			1
Painter, mechanic, and laborers, \$240 per annum to \$6.....per diem..		3	4	4
		1,979	1,982	2,013
Salaries.....		\$582,500.00	\$582,000.00	\$581,817.70
Wages.....		1,100.00	2,500.00	1,951.83
OTHER OBJECTS OF EXPENDITURE.				
Stationery.....				8,229.92
Traveling expenses.....		35,000.00	33,700.00	24,302.03
Miscellaneous items.....		16,200.00	14,600.00	7,534.57
Total.....		634,800.00	634,800.00	623,836.05

(40) For cooperative agricultural extension work, to be allotted, paid and expended in the same manner, upon the same terms and conditions, and under the same supervision as the additional appropriations made by the act of May 8, 1914 (38 Stat. L., p. 372), entitled "An act to provide for cooperative agricultural extension work between the agricultural colleges in the several States receiving the benefits of an act of Congress approved July 2, 1862, and of acts supplementary thereto, and the United States Department of Agriculture," \$1,500,000; and all sums appropriated by this act for use for demonstration or extension work within any State shall be used and expended in accordance with plans mutually agreed upon by the Secretary of Agriculture and the proper officials of the college in such State which receives the benefits of said act of May 8, 1914: *Provided*, That of the above appropriation not more than \$300,000 shall be expended for purposes other than the salaries of county agents (*acts July 2, 1862, vol. 12, p. 503, sec. 1; Mar 2, 1887, vol. 24, p. 440, secs. 1-10; Mar. 16, 1906, vol. 34, p. 63, secs. 2, 3; May 8, 1914, vol. 38, pp. 372-374, sec. 1; May 31, 1920, vol. 41, p. 720, sec. 1*).....\$1,500,000.00

Appropriation for 1920.....	\$1,500,000	Estimate for 1921.....	\$1,500,000
Appropriation for 1921.....	1,500,000	Estimate for 1922.....	1,500,000

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.		
<i>General Expenses, States Relations Services—Continued.</i>				
(41) To enable the Secretary of Agriculture to investigate and report concerning agriculture, for the purpose of agricultural instruction in schools, and to cooperate with the Federal Board for Vocational Education, as provided for in section 6 of the act of Congress approved February 23, 1917, entitled "An act to provide for the promotion of vocational education," [upon the organization and progress of farmers' institutes and agricultural schools in the several States and Territories, and upon similar organizations in foreign countries,] with special suggestions of plans and methods for making the schools [such organizations] more effective for the dissemination of the results of the work of the Department of Agriculture and the agricultural experiment stations, and of improved methods of agricultural practice, including the employment of labor in the city of Washington and elsewhere, and all other necessary expenses [\$16,360] (acts July 2, 1862, vol. 12, p. 503, sec. 1; Mar. 2, 1887, vol. 24, p. 440, secs. 1-10; Mar. 16, 1906, vol. 34, p. 63, secs. 2, 3; May 8, 1914, vol. 38, pp. 372-374, sec. 1; May 31, 1920, vol. 41, p. 720, sec. 1)-----	\$20, 600. 00			
Appropriation for 1912.....	\$10, 000	Estimate for 1913.....	\$15, 760	
Appropriation for 1913.....	15, 700	Estimate for 1914.....	23, 000	
Appropriation for 1914.....	23, 000	Estimate for 1915.....	23, 000	
Appropriation for 1915.....	23, 000	Estimate for 1916.....	20, 600	
Appropriation for 1916.....	20, 600	Estimate for 1917.....	20, 600	
Appropriation for 1917.....	20, 600	Estimate for 1918.....	20, 600	
Appropriation for 1918.....	20, 600	Estimate for 1919.....	20, 600	
Appropriation for 1919.....	20, 600	Estimate for 1920.....	20, 600	
Appropriation for 1920.....	20, 600	Estimate for 1921.....	16, 360	
Appropriations for 1921.....	16, 360	Estimates for 1922.....	20, 600	
<p>NOTE.—There is an increase in this item of \$4,240. The department is looked to as an authority on the subject matter of agriculture. In the present state of agricultural instruction in high and elementary schools, the teachers are poorly provided with textbooks, illustrative material, etc., along agricultural lines and have neither the time nor the training to enable them to secure from the mass of literature published by the department and the experiment stations the data needed from day to day in their work. By employing a small force of specially qualified men, the department is able to place the material before them in usable form. This service is greatly appreciated by teachers throughout the country, as evidenced by the increased demand for assistance of this character. The small increase recommended is urgently needed in order to help meet this demand. This will also enable the department to cooperate more effectively with the Federal Board for Vocational Education in carrying out the provisions of the vocational educational act.</p> <p>In view of the fact that the farmers' institute work is now considered a part of the extension work in most of the States, it was stated during the hearings on the bill of last year that a separate organization for work relating to the institutes was no longer considered essential. It is therefore recommended that the language of the paragraph be amended as indicated, so as to more accurately describe the work actually under way. It is also believed desirable to include specific authority for cooperation with the Federal Board for Vocational Education in carrying out the purposes of the vocational act.</p>				
Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.
Salaries:		Number.	Number.	Number.
Specialists.....per annum..	\$3,000.00	3	3	
Specialist.....do.....	2,700.00			1
Specialist.....do.....	2,520.00	1	1	
Specialist.....do.....	2,400.00			3
Specialist (temporary).....per diem..	8.50	1	1	1
Scientific assistant.....per annum..	1,920.00			1
Scientific assistant.....do.....	1,800.00			1
Clerk.....do.....	1,200.00			1
Clerk.....do.....	1,100.00			2
Collaborators, messengers, and charwoman, \$600 to \$1.....do.....		4	4	5
		9	9	19
Salaries.....		\$14,700.00	\$12,150.00	\$13,862.67
OTHER OBJECTS OF EXPENDITURE.				
Stationery.....		750.00	500.00	691.69
Traveling expenses.....		4,000.00	3,000.00	3,303.68
Telephone and telegraph service.....				204.58
Miscellaneous items.....		1,150.00	710.00	727.50
Total.....		20,600.00	15,360.00	18,790.12

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, States Relations Service—Continued.</i>		
<p>(42) To enable the Secretary of Agriculture to establish and maintain agricultural experiment stations in Alaska, Hawaii, Porto Rico, the island of Guam, and the Virgin Islands of the United States, including the erection of buildings, the preparation, illustration, and distribution of reports and bulletins, and all other necessary expenses, [\$210,000] \$310,000, as follows: Alaska, [\$75,000] \$120,000, of which [\$11,800] \$20,000, or so much thereof as may be necessary, shall be immediately available [for the erection of buildings, purchase of breeding live stock, and other expenses connected with the stock-breeding experiments on the island of Kodiak and at the Matanuska station]; Hawaii, [\$50,000] \$70,000; Porto Rico, \$50,000; Guam, [\$15,000] \$40,000; and the Virgin Islands of the United States, [\$20,000] \$30,000; and the Secretary of Agriculture is authorized to sell such products as are obtained on the land belonging to the agricultural experiment stations in Alaska, Hawaii, Porto Rico, the island of Guam, and the Virgin Islands of the United States, and the amount obtained from the sale thereof shall be covered into the Treasury of the United States as miscellaneous receipts: <i>Provided</i>, That of the sum herein appropriated for the experiment station in Hawaii [\$10,000] \$15,000 may be used in agricultural extension work in Hawaii (<i>acts July 2, 1862, vol. 12, p. 503, sec. 1; Mar. 2, 1887, vol. 24, p. 440, secs. 1-10; Mar. 16, 1906, vol. 34, p. 63, secs. 2, 3; May 8, 1914, vol. 38, pp. 372-374, sec. 1; May 31, 1920, vol. 41, p. 720, sec. 1</i>) -----</p>	\$310,000.00	
<p>Appropriation for 1912..... \$105,000 Appropriation for 1913..... 105,000 Appropriation for 1914..... 110,000 Appropriation for 1915..... 120,000 Appropriation for 1916..... 120,000 Appropriation for 1917..... 143,000 Appropriation for 1918..... 155,000 Appropriation for 1919..... 190,000 Appropriation for 1920..... 215,000 Appropriation for 1921..... 210,000</p>	<p>Estimate for 1913..... \$105,000 Estimate for 1914..... 110,000 Estimate for 1915..... 115,000 Estimate for 1916..... 120,000 Estimate for 1917..... 155,000 Estimate for 1918..... 175,000 Estimate for 1919..... 190,000 Estimate for 1920..... 215,000 Estimate for 1921..... 230,000 Estimate for 1922..... 310,000</p>	
NOTE.—There is an increase in this item of \$100,000, which it is proposed to expend as follows:		
<p>(a) \$45,000 for the Alaska stations. Most of this increase will be used for the erection of buildings and for the hire of labor, the stations now being required to pay laborers at least one-third more wages than during the past fiscal year. All the stations are isolated, and it is necessary to furnish living quarters for the permanent staff. The work at the interior stations has grown to such an extent that permanent assistants are needed at Rampart, Fairbanks, and Matanuska. New buildings will be required and the old ones will have to be extensively repaired and occupied if the work is to be properly developed. An estimate of \$5,000 is included for the employment of an extension agent for Alaska. This is in line with work previously contemplated and is urgently recommended by the Alaska Development Commission appointed by the Secretary of the Interior. Many of the settlers in Alaska have had but little agricultural experience, and there is great need of an extension agent to cover the Yukon, Tanana, and Susitna valleys to aid the farmers with their problems.</p>		
<p>In line with the foregoing recommendations, and in order to begin the construction work at the earliest possible date, it is recommended that \$20,000 of the total appropriation be made immediately available.</p>		
<p>(b) \$20,000 for the Hawaii station. This increase is requested in order to enable the station to pay more adequate salaries to its employees, provide for a home demonstration agent and a boys' and girls' club leader, cooperate with the War Department in the more adequate production of food and forage in Hawaii, and defray the cost of connecting some laborers' quarters and station buildings with the sewage system of Honolulu. The turnover in the staff of the station during the past year was fully 100 per cent, on account of resignations of employees to accept outside positions at much higher salaries. The work now being done by the extension agents in improving and diversifying agriculture should be supplemented. Limited attempts have been made to organize</p>		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.																																																																																																																								
<i>General Expenses, States Relations Service—Continued.</i>																																																																																																																										
<p>this work, and the immediate success attained seems to warrant placing it on a permanent basis. With the large foreign population of Hawaii, it is believed that home demonstration work and club work would appeal to the people and arouse a greater interest in the other work of the station. In connection with this recommendation, it is proposed to increase the amount of the proviso for extension work in Hawaii from \$10,000 to \$15,000. The station has been without an entomologist for several years, and the plant pathologist resigned during the year to accept outside employment at an increased salary. It is planned to combine the positions of entomologist and plant pathologist and fill the place if possible.</p> <p>(c) \$25,000 for the Guam station. Of this sum, \$15,000 is desired to provide some badly needed buildings for the main station at Piti and for the stock farm at Cotot, some 10 miles away. No specific appropriation has ever been made for station buildings. Residences for the permanent force are urgently needed. It is proposed to construct these of reinforced concrete. A concrete seed and forage barn is needed to properly store and prepare seed grain and forage. The station has experienced considerable losses of cattle from tick fever, and dipping vats and accompanying corrals are needed both at Piti and Cotot. Provision is also included in these estimates for an entomologist and plant pathologist who shall act as quarantine officer against the introduction of fungous, insect, and other pests that may prove destructive to Guam agriculture.</p> <p>(d) \$10,000 for the Virgin Islands station. This station is in need of adequate buildings, not only for the offices and laboratories, but for residences of the members of the staff. The station is located on an old cane plantation, about 2½ miles from the nearest town. There is but one desirable residence on the station. Most of the buildings now in use belonged to the plantation when it was acquired and are not designed for the use to which they are now put. Many of them were badly damaged by the hurricane of 1916 and still remain in that condition with only minor repairs. Provision should be made for two reinforced concrete cottages to be occupied by members of the station, who are appointed from the States and are accustomed to some of the comforts of modern life. It should be mentioned that during the past year over \$6,300 was returned to the Treasury as receipts from the sale of products grown at the Virgin Islands station.</p>																																																																																																																										
<i>Alaska Experiment Station.</i>																																																																																																																										
<table><tr><th>Employees.</th><th>Rate.</th><th>Esti- mated, 1922.</th><th>Appre- iated, 1921.</th><th>Ex- pended, 1920.</th></tr><tr><td>Salaries:</td><td></td><td><i>Number.</i></td><td><i>Number.</i></td><td><i>Number.</i></td></tr><tr><td>Specialist.....per annum.....</td><td>\$4,000.00</td><td>1</td><td>1</td><td></td></tr><tr><td>Agronomist in charge.....do.....</td><td>4,000.00</td><td>1</td><td>1</td><td></td></tr><tr><td>Agronomist in charge.....do.....</td><td>3,500.00</td><td></td><td></td><td>1</td></tr><tr><td>Agent.....do.....</td><td>3,300.00</td><td>3</td><td>3</td><td></td></tr><tr><td>Agent.....do.....</td><td>3,000.00</td><td>2</td><td>1</td><td></td></tr><tr><td>Agent.....do.....</td><td>2,820.00</td><td></td><td></td><td>2</td></tr><tr><td>Agent.....do.....</td><td>2,500.00</td><td></td><td></td><td>1</td></tr><tr><td>Agent.....do.....</td><td>2,400.00</td><td>1</td><td>1</td><td>1</td></tr><tr><td>Agent.....do.....</td><td>2,220.00</td><td>1</td><td>1</td><td></td></tr><tr><td>Agent.....do.....</td><td>2,000.00</td><td>2</td><td>2</td><td>2</td></tr><tr><td>Agent.....do.....</td><td>1,800.00</td><td>2</td><td>2</td><td>2</td></tr><tr><td>Clerks, temporary, \$1,400 to \$1,300.....do.....</td><td></td><td></td><td>2</td><td></td></tr><tr><td>Wages:</td><td></td><td></td><td></td><td></td></tr><tr><td>Miscellaneous temporary labor, \$8 to \$2.50.....per diem.....</td><td></td><td>50</td><td>35</td><td>35</td></tr><tr><td></td><td></td><td>62</td><td>49</td><td>44</td></tr><tr><td>Salaries.....</td><td></td><td>\$32,100.00</td><td>\$29,100.00</td><td>\$21,003.43</td></tr><tr><td>Wages.....</td><td></td><td>45,000.00</td><td>25,000.00</td><td>20,624.25</td></tr><tr><td colspan="5">OTHER OBJECTS OF EXPENDITURE.</td></tr><tr><td>Traveling expenses.....</td><td></td><td>3,500.00</td><td>1,500.00</td><td>1,766.09</td></tr><tr><td>Equipment and material.....</td><td></td><td>30,000.00</td><td>15,000.00</td><td>17,932.88</td></tr><tr><td>Miscellaneous items.....</td><td></td><td>9,400.00</td><td>4,400.00</td><td>13,673.35</td></tr><tr><td>Total.....</td><td></td><td>120,000.00</td><td>75,000.00</td><td>75,000.00</td></tr></table>	Employees.	Rate.	Esti- mated, 1922.	Appre- iated, 1921.	Ex- pended, 1920.	Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>	Specialist.....per annum.....	\$4,000.00	1	1		Agronomist in charge.....do.....	4,000.00	1	1		Agronomist in charge.....do.....	3,500.00			1	Agent.....do.....	3,300.00	3	3		Agent.....do.....	3,000.00	2	1		Agent.....do.....	2,820.00			2	Agent.....do.....	2,500.00			1	Agent.....do.....	2,400.00	1	1	1	Agent.....do.....	2,220.00	1	1		Agent.....do.....	2,000.00	2	2	2	Agent.....do.....	1,800.00	2	2	2	Clerks, temporary, \$1,400 to \$1,300.....do.....			2		Wages:					Miscellaneous temporary labor, \$8 to \$2.50.....per diem.....		50	35	35			62	49	44	Salaries.....		\$32,100.00	\$29,100.00	\$21,003.43	Wages.....		45,000.00	25,000.00	20,624.25	OTHER OBJECTS OF EXPENDITURE.					Traveling expenses.....		3,500.00	1,500.00	1,766.09	Equipment and material.....		30,000.00	15,000.00	17,932.88	Miscellaneous items.....		9,400.00	4,400.00	13,673.35	Total.....		120,000.00	75,000.00	75,000.00		
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Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.					Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, States Relations Service—Continued.</i>						
<i>Hawaii Experiment Station.</i>						
Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Ex- pended, 1920.		
Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>		
Specialist.....per annum..	\$4,000.00	1	1	1		
Agronomist in charge.....do...	4,000.00	1	1	1		
Agronomist in charge.....do...	3,500.00			1		
Superintendent of extension.....do...	3,000.00	1	1	1		
Agent.....do...	3,000.00	1	1	1		
Agent.....do...	2,000.00	2				
Horticulturist.....do...	3,000.00	1	1			
Horticulturist.....do...	2,400.00			1		
Horticulturist.....do...	1,500.00	1	1			
Chemist.....do...	3,000.00	1				
Chemist.....do...	2,400.00			1		
Chemist.....do...	2,040.00	1	1	1		
Chemist.....do...	1,440.00			1		
Pathologist and entomologist.....do...	3,000.00	1				
Pathologist.....do...	2,100.00			1		
Agronomist.....do...	2,220.00	1	1	1		
Clerk.....do...	1,500.00	1	1	1		
Clerk.....do...	1,400.00	1	2	1		
Clerk.....do...	1,300.00		1			
Collaborators and messengers, \$900 to \$300.....do...		5	5	5		
Wages:						
Miscellaneous temporary labor, \$3.00 to \$0.75.....per diem..		25	25	25		
		43	42	41		
Salaries.....		\$33,760.00	\$23,760.00	\$20,394.61		
Wages.....		15,720.00	14,620.00	17,362.16		
OTHER OBJECTS OF EXPENDITURE.						
Traveling expenses.....		5,200.00	3,000.00	3,258.30		
Equipment and material.....		7,000.00	4,000.00	4,143.19		
Miscellaneous items.....		8,320.00	4,620.00	4,841.74		
Total.....		70,000.00	50,000.00	50,000.00		
<i>Porto Rico Experiment Station.</i>						
Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Ex- pended, 1920.		
Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>		
Specialist.....per annum..	\$4,000.00		1			
Agronomist in charge.....do...	4,000.00	1	1			
Agronomist.....do...	3,500.00			1		
Specialist.....do...	3,000.00	1	1			
Specialist.....do...	2,500.00			1		
Chemist.....do...	3,000.00	1	1			
Chemist.....do...	2,400.00			1		
Chemist.....do...	1,800.00	1	1			
Chemist.....do...	1,620.00			1		
Horticulturist.....do...	2,700.00	1	1			
Horticulturist.....do...	2,280.00			1		
Horticulturist.....do...	1,800.00			1		
Pathologist.....do...	2,400.00	1				
Entomologist.....do...	2,400.00	1	1	1		
Veterinary inspector.....do...	2,400.00	1				
Technologist.....do...	2,280.00	1	1	1		
Plant breeder.....do...	2,040.00	2	2	1		
Clerk.....do...	1,620.00	1	1	1		
Clerk.....do...	1,400.00		1			
Clerk.....do...	1,300.00		1			
Clerk.....do...	1,200.00	2	2	1		
Wages:						
Miscellaneous temporary labor, \$5 to \$0.50.....per diem..			35	35		
		14	50	46		
Salaries.....		\$27,080.00	\$27,280.00	\$22,316.00		
Wages.....		12,000.00	12,000.00	15,358.04		
OTHER OBJECTS OF EXPENDITURE.						
Stationery.....				1,076.82		
Traveling expenses.....		1,500.00	1,000.00	1,361.45		
Equipment and material.....		5,000.00	5,500.00	2,707.89		
Miscellaneous items.....		4,420.00	4,220.00	7,179.80		
Total.....		50,000.00	50,000.00	50,000.00		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.					Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, States Relations Service—Continued.</i>						
<i>Guam Experiment Station.</i>						
Employees.	Rate.	Esti- mated, 1922.	Appro- priated, 1921.	Ex- pended, 1920.		
Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>		
Animal husbandman in charge, per annum	\$2,700.00	1	1	1		
Agronomist.....do	2,220.00	1	1	1		
Extension agent.....do	2,220.00	1	1	1		
Extension agent.....do	1,980.00			1		
Entomologist and pathologist.....do	2,400.00	1				
Agent.....do	1,860.00	1	1	1		
Foreman.....do	1,320.00	1	1	1		
Assistant.....do	900.00	2	1	1		
Wages:						
Miscellaneous temporary labor, \$2.50 to \$0.50.....per diem		30	15	25		
		38	21	30		
Salaries.....		\$14,520.00	\$9,220.00	\$9,480.00		
Wages.....		10,260.00	2,800.00	6,341.97		
OTHER OBJECTS OF EXPENDITURE.						
Traveling expenses.....		500.00	100.00	808.61		
Equipment and material.....		9,000.00	1,600.00	2,929.04		
Miscellaneous items.....		5,720.00	1,280.00	5,440.38		
Total.....		40,000.00	15,000.00	25,000.00		
<i>Virgin Islands Experiment Station.</i>						
Employees.	Rate.	Esti- mated, 1922.	Appro- priated, 1921.	Ex- pended, 1920.		
Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>		
Specialist.....per annum	\$4,000.00		1			
Agronomist in charge.....do	3,000.00	1	1	1		
Entomologist.....do	2,220.00	1	1			
Entomologist.....do	2,000.00			1		
Horticulturist.....do	2,400.00	1	1			
Chemist.....do	2,000.00	1				
Clerk.....do	1,440.00	1	1	1		
Clerk.....do	1,400.00		1			
Wages:						
Miscellaneous temporary labor, \$3 to \$0.50.....per diem		25	22			
		30	28	3		
Salaries.....		\$11,060.00	\$9,060.00	\$5,960.00		
Wages.....		7,100.00	6,000.00	5,187.49		
OTHER OBJECTS OF EXPENDITURE.						
Traveling expenses.....		500.00	500.00	386.25		
Equipment and material.....		8,800.00	2,200.00	1,723.18		
Miscellaneous items.....		2,540.00	2,240.00	1,743.08		
Total.....		30,000.00	20,000.00	15,000.00		
(43) To enable the Secretary of Agriculture to investigate the relative utility and economy of agricultural products for food, clothing, and other uses in the home, with special suggestions of plans and methods for the more effective utilization of such products for these purposes, with the cooperation of other bureaus of the department, and to disseminate useful information on this subject, including the employment of labor in the city of Washington and elsewhere, supplies, and all other necessary expenses [\$44,300] (<i>acts July 2, 1862, vol. 12, p. 503, sec. 1; Mar. 2, 1887, vol. 24, p. 440, secs. 1-10; Mar. 16, 1906, vol. 34, p. 63, secs. 2, 3; May 8, 1914, vol. 38, pp. 372-374, sec. 1; May 31, 1920, vol. 41, p. 720, sec. 1</i>)					\$80,000.00	
Appropriation for 1912.....	\$15,000	Estimate for 1913.....	\$20,000			
Appropriation for 1913.....	16,000	Estimate for 1914.....	19,000			
Appropriation for 1914.....	16,000	Estimate for 1915.....	25,760			
Appropriation for 1915.....	25,760	Estimate for 1916.....	26,500			
Appropriation for 1916.....	26,500	Estimate for 1917.....	24,220			
Appropriation for 1917.....	24,220	Estimate for 1918.....	50,000			
Appropriation for 1918.....	35,000	Estimate for 1919.....	30,120			
Appropriation for 1919.....	30,120	Estimate for 1920.....	76,280			
Appropriation for 1920.....	46,280	Estimate for 1921.....	74,300			
Appropriation for 1921.....	44,300	Estimate for 1922.....	80,000			

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.					Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, States Relations Service—Continued.</i>						
<p>NOTE.—There is an increase in this item of \$35,700. Present economic conditions have greatly increased the public interest in problems connected with food, clothing, and household equipment and management as related to the income and well-being of people in American homes. Evidences of this are seen in the expansion of instruction in home economics in colleges and schools, especially under the vocational education act, development of the home demonstration work aided by the farm bureaus and women's organizations, and the efforts of labor organizations and business managers to improve the living conditions of people engaged in industries. Reliable information on these subjects is comparatively limited, and many of the problems require scientific research as a basis for their satisfactory solution. It is proposed to use this increase for the following purposes:</p> <p>(a) \$17,200 to enlarge the work on food and dietetics.</p> <p>(b) \$5,000 to study the problems of household labor and equipment and improved methods of household management.</p> <p>(c) \$6,000 to study economy in the use and care of fabrics for clothing and other purposes in the home.</p> <p>(d) \$7,500 to enlarge the work with the respiration calorimeter.</p>						
Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.		
Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>		
Chief.....per annum..	\$4,000.00	1	1			
Chief.....do.....	3,500.00			1		
Specialist.....do.....	3,600.00	1	1			
Specialist.....do.....	3,000.00			1		
Specialist.....do.....	2,700.00			1		
Specialist.....do.....	2,520.00	3	3			
Specialist.....do.....	2,400.00	5	1	1		
Specialist.....do.....	2,280.00	3				
Specialist.....do.....	2,220.00			2		
Specialist.....do.....	2,160.00			1		
Specialist.....do.....	1,800.00	5	2	1		
Specialist.....do.....	1,680.00	1				
Specialist.....do.....	1,560.00			1		
Specialist.....do.....	1,440.00			1		
Specialist.....per diem..	8.00	2	2	2		
Scientific assistant.....per annum..	2,160.00	2	2			
Scientific assistant.....do.....	1,800.00	2	2	2		
Scientific assistant.....do.....	1,620.00			1		
Scientific assistant.....do.....	1,600.00	1	1	1		
Scientific assistant.....do.....	1,560.00	2	2	4		
Scientific assistant.....do.....	1,500.00			1		
Scientific assistant.....do.....	1,440.00	1	1	3		
Scientific assistant.....do.....	1,320.00	1	1	2		
Scientific assistant.....do.....	1,200.00	1	1	3		
Clerk.....do.....	2,040.00	1				
Clerk.....do.....	1,740.00			1		
Clerk.....do.....	1,200.00	3		5		
Student assistants and charwomen, \$480 to \$240.....do.....		8	7	8		
		43	27	43		
Salaries.....		\$68,885.00	\$36,565.00	\$37,887.41		
OTHER OBJECTS OF EXPENDITURE.						
Traveling expenses.....		3,000.00	1,500.00	1,493.05		
Equipment and material.....		3,000.00	1,735.00	1,371.12		
Miscellaneous items.....		5,115.00	4,500.00	4,169.16		
Total.....		80,000.00	44,300.00	44,920.74		
(44) For general administrative expenses connected with the lines of work of the States Relations Service, including the offices of the director, the chief clerk, the officers in charge of publications, library, accounts, records, supplies, and property, and for miscellaneous expenses incident thereto [\$12,600] (<i>acts July 2, 1862, vol. 12, p. 503, sec. 1; Mar. 2, 1887, vol. 24, p. 440, secs. 1-10; Mar. 16, 1906, vol. 34, p. 63, secs. 2, 3; May 8, 1914, vol. 38, pp. 372-374, sec. 1; May 31, 1920, vol. 41, p. 720, sec. 1</i>).....					\$20,000.00	
Appropriation for 1917.....	\$16,280	Estimate for 1918.....	\$20,000			
Appropriation for 1918.....	15,680	Estimate for 1919.....	15,680			
Appropriation for 1919.....	15,680	Estimate for 1920.....	19,180			
Appropriation for 1920.....	14,180	Estimate for 1921.....	22,600			
Appropriation for 1921.....	12,600	Estimate for 1922.....	20,000			

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
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General Expenses, States Relations Service—Continued.

NOTE.—There is an increase in this item of \$7,400. The present appropriation is inadequate to meet the expenses properly chargeable against this item. The correspondence and other business of the service has greatly increased, and the cost of temporary labor, supplies, equipment, and transportation is much higher than formerly. The appropriation for administrative expenses when the States Relations Service was organized in 1915 was \$20,100. This has since been gradually reduced by reason of transfers to the statutory roll. If it were possible to make the best use of the statutory salaries, this reduction in the administrative expense item would not be so vital a matter, but so many of the statutory places have remained unfilled because of the small salaries that it has been practically impossible to use them.

Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.
Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>
Agricultural physicist.....per annum..	\$4,000.00	1	1	
Agricultural physicist.....do.....	3,500.00			1
Scientific assistant.....do.....	2,460.00	1		1
Scientific assistant.....do.....	2,160.00	1		1
Scientific assistant.....do.....	1,560.00			1
Scientific assistant.....do.....	1,500.00		1	
Scientific assistant.....do.....	1,200.00	2	2	1
Clerk.....do.....	2,400.00	1	1	1
Clerks, temporary, \$1,200 to \$1,000.....do.....		4	1	4
Messenger.....do.....	\$40.00			1
Wages:				
Laborers, mechanics, and painters—				
\$720 to \$480.....do.....		2	1	2
\$6 to \$4.....per diem.....		3	2	4
		15	9	17
Salaries.....		\$14,000.00	\$9,000.00	\$8,229.10
Wages.....		1,500.00	1,000.00	2,075.33
OTHER OBJECTS OF EXPENDITURE.				
Stationery.....		1,500.00	750.00	694.76
Travelling expenses.....		1,000.00	650.00	519.92
Telephone and telegraph service.....		650.00	400.00	423.50
Miscellaneous items.....		1,350.00	800.00	2,039.40
Total.....		20,000.00	12,600.00	13,982.01

In all, for general expenses \$4,802,620.00 \$4,635,280.00

Appropriations for 1912..... \$1,592,500	Estimates for 1913..... \$1,604,160
Appropriations for 1913..... 1,599,160	Estimates for 1914..... 1,615,500
Appropriations for 1914..... 1,613,500	Estimates for 1915..... 1,615,255
Appropriations for 1915..... 1,633,500	Estimates for 1916..... 2,718,700
Appropriations for 1916..... 2,718,700	Estimates for 1917..... 2,754,140
Appropriations for 1917..... 2,812,140	Estimates for 1918..... 3,017,900
Appropriations for 1918..... 2,972,580	Estimates for 1919..... 2,969,840
Appropriations for 1919..... 2,969,840	Estimates for 1920..... 3,041,980
Appropriations for 1920..... 4,701,980	Estimates for 1921..... 4,705,280
Appropriations for 1921..... 4,635,280	Estimates for 1922..... 4,802,620

Statement of clerks employed in District of Columbia under lump-fund appropriations for 30 days or more during the fiscal year ended June 30, 1920 (32 Stat., p. 303).

GENERAL EXPENSES, STATES RELATIONS SERVICE.

2 clerks, at \$2,400 each per annum.	1 clerk, \$1,500 per annum.
1 clerk, \$2,220 per annum.	13 clerks, at \$1,400 each per annum.
1 clerk, \$2,000 per annum.	51 clerks, at \$1,200 each per annum.
2 clerks, at \$1,800 each per annum.	53 clerks, at \$1,100 each per annum.
1 clerk, \$1,740 per annum.	1 clerk, \$1,080 per annum.
1 clerk, \$1,600 per annum.	7 clerks, at \$1,000 each per annum.

Total for States Relations Service 5,038,020.00 4,870,160.00

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
BUREAU OF PUBLIC ROADS.		
<i>Salaries, Bureau of Public Roads—</i>		
(1) One chief of bureau (increase of \$1,500) (<i>R. S., p. 87, secs. 520-523; acts Mar. 3, 1905, vol. 33, p. 882, sec. 1; May 31, 1920, vol. 41, pp. 721, 722, sec. 1</i>)-----	\$7, 500. 00	
NOTE.—An increase of \$1,500 in the salary of the chief of bureau is recommended. See note under item 1, p. 19.		
(2) One purchasing agent (by transfer from lump fund) (<i>same acts</i>)-----	2, 500. 00	
(3) One draftsman or clerk (<i>same acts</i>)-----	1, 920. 00	
(4) One clerk (<i>same acts</i>)-----	1, 900. 00	
(5) One instrument maker (increase of \$300) (<i>same acts</i>)-----	2, 100. 00	
NOTE.—Small increases are recommended in the salary of this employee and the model maker provided for in item 6. Both are expert mechanics, who render very valuable services in connection with the designing, construction, and repair of instrumental equipment required in road work. Commercial concerns pay much higher salaries for services requiring like skill. With the large increase in Federal aid road work during the past few years, the duties and responsibilities of these employees have greatly increased.		
(6) One model maker (increase of \$300) (<i>same acts</i>)-----	2, 100. 00	
NOTE.—See note under item 5.		
(7) Four clerks, class 4 (<i>same acts</i>)-----	7, 200. 00	
(8) Seven clerks, class 3 (<i>same acts</i>)-----	11, 200. 00	
(9) One clerk or editorial clerk (<i>same acts</i>)-----	1, 600. 00	
(10) Five clerks, at \$1,500 each (increase of 2) (<i>same acts</i>)-----	7, 500. 00	
NOTE.—These new places and those in items 14, 16, and 27 are submitted in lieu of the places dropped in items 12, 13, 15, 17, 23, 26, 28, 29, 30, 32, and 35. This readjustment of the clerical force involves the addition of 16 new places, aggregating \$21,000, and the elimination of 24 places, amounting to \$27,160, resulting in a net decrease of 8 places and \$6,160 in the total amount.		
The places dropped are all in the lower grades and are now either vacant or filled only temporarily. It is intended to use the new places for promotions of present employees.		
In the present roll there are a dozen or so different grades between \$1,000 and \$1,500. The proposed readjustment is an attempt to reduce the number of grades and eliminate some of the double titles, such as "clerk or instrument maker," "clerk or tabulator," etc., which are no longer needed. The position of "lantern slide colorist, \$1,320" (item 35), is vacant at the present time.		
(11) One clerk or photographer (<i>same acts</i>)-----	1, 440. 00	
(12) One clerk or instrument maker, \$1,440.		
NOTE.—See note under item 10.		
(13) One clerk or tabulator, \$1,440.		
NOTE.—See note under item 10.		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>Salaries, Bureau of Public Roads—Continued.</i>		
(14) Six clerks, class 2 (increase of 5) (<i>R. S., p. 87, secs. 520-523; acts Mar. 3, 1905, vol. 33, p. 82, sec. 1; May 31, 1920, vol. 41, pp. 721, 722, sec. 1</i>) -----	\$8, 400. 00	
NOTE.—See note under item 10.		
(15) Two clerks, at \$1,380 each.		
NOTE.—See note under item 10.		
(16) Seven clerks, at \$1,320 each (increase of 5) (<i>same acts</i>)-----	9, 240. 00	
NOTE.—See note under item 10.		
(17) Four clerks, at \$1,260 each.		
NOTE.—See note under item 10.		
(18) Seven clerks, class 1 (<i>same acts</i>)-----	8, 400. 00	
(19) One clerk or editorial clerk (<i>same acts</i>)-----	1, 200. 00	
(20) One draftsman, \$1,320.		
NOTE.—See note under item 21.		
(21) One clerk or draftsman (<i>submitted</i>)-----	1, 320. 00	
NOTE.—This is a change in designation from draftsman, \$1,320 (item 20), which is recommended in order to make it possible to utilize the place for the employment of the class of service most needed. Under existing conditions it is difficult to hold the services of experienced draftsmen at \$1,320.		
(22) One clerk or draftsman (<i>R. S., p. 87, secs. 520-523; acts Mar. 3, 1905, vol. 33, p. 882, sec. 1; May 31, 1920, vol. 41, pp. 721, 722, sec. 1</i>)-----	1, 200. 00	
(23) One clerk or draftsman, \$900.		
NOTE.—See note under item 10.		
(24) One clerk or photographer (<i>same acts</i>)-----	1, 200. 00	
(25) One clerk or photographer (<i>same acts</i>)-----	1, 000. 00	
(26) Two clerks, at \$1,140 each.		
NOTE.—See note under item 10.		
(27) Five clerks, at \$1,100 each (increase of 4) (<i>same acts</i>)-----	5, 500. 00	
NOTE.—See note under item 10.		
(28) Two clerks, at \$1,080 each.		
NOTE.—See note under item 10.		
(29) One clerk, \$1,020.		
NOTE.—See note under item 10.		
(30) Two clerks, at \$1,000 each (decrease of 7) (<i>same acts</i>)-----	2, 000. 00	
NOTE.—See note under item 10.		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.		Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>Salaries, Bureau of Public Roads—Continued.</i>			
(31) One clerk or skilled laborer (<i>R. S., p. 87, secs. 520-523; acts Mar. 3, 1905, vol. 33, p. 882, sec. 1; May 31, 1920, vol. 41, pp. 721, 722, sec. 1</i>).....	\$1, 000. 00		
(32) Two clerks, at \$900 each. NOTE.—See note under item 10.			
(33) One mechanic (<i>same acts</i>).....	1, 680. 00		
(34) One clerk or instrument maker (<i>same acts</i>).....	1, 200. 00		
(35) One lantern-slide colorist, \$1,320. NOTE.—See note under item 10.			
(36) One mechanic (<i>same acts</i>).....	2, 100. 00		
(37) One mechanic (by transfer from lump fund) (<i>same acts</i>)....	1, 800. 00		
(38) One mechanic (<i>same acts</i>).....	1, 500. 00		
(39) One mechanic (<i>same acts</i>).....	1, 200. 00		
(40) One skilled laborer (<i>same acts</i>).....	1, 200. 00		
(41) One skilled laborer or mechanic (<i>same acts</i>).....	840. 00		
(42) One laboratory aid (<i>same acts</i>).....	960. 00		
(43) One telephone operator (increase of \$180) (<i>same acts</i>)..... NOTE.—This change is recommended in order to place the salary of the bureau's telephone operator on a par with that paid for similar services in other branches of the department.	900. 00		
(44) Two laborers, at \$900 each (<i>same acts</i>).....	1, 800. 00		
(45) One mimeograph operator (by transfer from lump fund) (<i>same acts</i>).....	840. 00		
(46) Two messengers or laborers, at \$840 each (<i>same acts</i>).....	1, 680. 00		
(47) Four messengers, laborers, or laboratory helpers, at \$720 each (increase of 2 by transfer from lump fund) (<i>same acts</i>)....	2, 880. 00		
(48) Two messengers or laborers, at \$660 each (<i>same acts</i>).....	1, 320. 00		
(49) Four messengers or laborers, at \$600 each (<i>same acts</i>).....	2, 400. 00		
(50) Three messenger boys, at \$600 each (<i>same acts</i>).....	1, 800. 00		
(51) One fireman (<i>same acts</i>).....	720. 00		
(52) Eight messenger boys, at \$480 each (<i>same acts</i>).....	3, 840. 00		
(53) Eleven charwomen, at \$240 each (increase of 3 by transfer from lump fund) (<i>same acts</i>).....	2, 640. 00		
Appropriations for 1912..... \$34, 020	Estimates for 1913..... \$37, 940	\$120, 720. 00	\$117, 300. 00
Appropriations for 1913..... 37, 020	Estimates for 1914..... 54, 400		
Appropriations for 1914..... 47, 400	Estimates for 1915..... 53, 000		
Appropriations for 1915..... 52, 500	Estimates for 1916..... 75, 960		
Appropriations for 1916..... 75, 960	Estimates for 1917..... 88, 880		
Appropriations for 1917..... 88, 380	Estimates for 1918..... 98, 720		
Appropriations for 1918..... 95, 360	Estimates for 1919..... 104, 020		
Appropriations for 1919..... 104, 020	Estimates for 1920..... 112, 140		
Appropriations for 1920..... 113, 640	Estimates for 1921..... 120, 400		
Appropriations for 1921..... 117, 300	Estimates for 1922..... 120, 720		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>Salaries, Bureau of Public Roads—Continued.</i>		
NOTE.—Apparent increase, \$3,420; actual decrease, \$3,880, as follows:		
<i>Promotions.</i>		
1 chief of bureau, from \$6,000 to \$7,500.....	\$1, 500	
1 instrument maker, from \$1,800 to \$2,100.....	300	
1 model maker, from \$1,800 to \$2,100.....	300	
1 telephone operator, from \$720 to \$900.....	180	
	<u>2, 280</u>	
<i>New places.</i>		
2 clerks, at \$1,500 each.....	3, 000	
5 clerks, class 2.....	7, 000	
5 clerks, at \$1,320 each.....	6, 600	
4 clerks, at \$1,100 each.....	4, 400	
1 clerk or draftsman.....	1, 320	
	<u>22, 320</u>	
	<u>\$24, 600</u>	
<i>Places dropped.</i>		
1 clerk or instrument maker.....	1, 440	
1 clerk or tabulator.....	1, 440	
2 clerks, at \$1,380 each.....	2, 760	
4 clerks, at \$1,260 each.....	5, 040	
1 clerk or draftsman.....	900	
2 clerks, at \$1,140 each.....	2, 280	
2 clerks, at \$1,080 each.....	2, 160	
1 clerk.....	1, 020	
7 clerks, at \$1,000 each.....	7, 000	
2 clerks, at \$900 each.....	1, 800	
1 lantern-slide colorist.....	1, 320	
1 draftsman.....	1, 320	
	<u>28, 480</u>	
Actual decrease.....		3, 880
<i>Transfers from lump funds, which funds have been correspondingly reduced.</i>		
1 purchasing agent.....	2, 500	
1 mechanic.....	1, 800	
1 mimeograph operator.....	840	
2 messengers, laborers, or laboratory helpers, at \$720 each.....	1, 440	
3 charwomen, at \$240 each.....	720	
	<u>7, 300</u>	
Apparent increase.....		3, 420
<i>General Expenses, Bureau of Public Roads—</i>		
(54) For salaries and the employment of labor in the city of Washington and elsewhere, supplies, office fixtures, apparatus, traveling and all other necessary expenses, for conducting investigations and experiments, and for collating, reporting, and illustrating the results of same, and for preparing, publishing, and distributing bulletins and reports, as follows: <i>Provided</i> , That no part of these appropriations shall be expended for the rent or purchase of road-making machinery, except such as may be necessary for field experimental work as hereinafter provided for (acts Mar. 3, 1905, vol. 33, p. 882, sec. 1; May 31, 1920, vol. 41, pp. 722, 723, sec. 1):		
(55) For inquiries in regard to systems of road management [throughout the United States], and economic studies of highway construction, operation, maintenance, and value, either independently or in cooperation with the State highway departments and other agencies, and for giving expert advice on [this subject] these subjects [\$36,200] (same acts).....		\$61, 200. 00

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Bureau of Public Roads—Continued.</i>		
Appropriation for 1912..... \$20,000	Estimate for 1913..... \$25,000	
Appropriation for 1913..... 25,000	Estimate for 1914..... 56,500	
Appropriation for 1914..... 40,000	Estimate for 1915..... 48,800	
Appropriation for 1915..... 44,800	Estimate for 1916..... 42,600	
Appropriation for 1916..... 43,600	Estimate for 1917..... 39,540	
Appropriation for 1917..... 39,540	Estimate for 1918..... 41,040	
Appropriation for 1918..... 41,040	Estimate for 1919..... 40,040	
Appropriation for 1919..... 40,040	Estimate for 1920..... 38,240	
Appropriation for 1920..... 38,240	Estimate for 1921..... 36,200	
Appropriation for 1921..... 36,200	Estimate for 1922..... 61,200	

NOTE.—There is an apparent increase in this item of \$25,000, but taking into consideration the transfers to the statutory roll, amounting to \$2,230, the actual increase is \$27,280. This increase is requested in order to provide for the extension of economic studies of vitally important projects in connection with the development of the highway improvement plan. The vast road-building program which has been made possible by the large Federal, State, and local appropriations for that purpose makes it a matter of first importance that everything possible be done to insure that these funds may be expended on the more essential roads and for such types as will best meet the traffic needs at the most economical cost for construction and maintenance. The projects to be undertaken will include the following:

Traffic studies.—It is estimated that the traffic of our rural highways has increased more than 500 per cent during the past 10 years. The character and amount of traffic which the highways must carry is a fundamental question which is necessarily influenced by the character of land, distribution of population, and proximity and relationship of other transportation systems, and should be the subject of very thorough study, if our highways are to be improved on a systematic and economic basis. The State highway departments need to have assembled in usable form all practical data on the regulation of traffic, the adaptation of costs and methods of financing road building to traffic conditions, and the relation of maintenance methods and costs to traffic requirements.

Highway management.—The use of highways for extending express, freight, and parcel post service to rural districts possesses possibilities not yet fully appreciated in its relationship to the building up and maintenance of greater permanency in the agricultural population, and in providing facilities for and greater efficiency in the movement of food products from the producer to the consumer. Very little authentic data relative to these subjects have been gathered and made available, either as a basis for legislation or for the determination of highway administrative policies.

Road administration.—When the earlier road management studies made by the department were undertaken, highway improvement was largely considered of local rather than State or National concern. Many of the earlier studies covered a range of territory such as would be within the radius of horse-drawn vehicles, and advice and assistance were given to county or district officials. Some of this work should be continued, but more recently the demand has come for studies on a more extensive scale, including State-wide studies of traffic administration policies and returns from the money invested in improved highways. These studies should include inquiry into the character of the organization, working plan, cost of operation, system of reports and records, character and cost of work done, classification of highways, and the purposes served, and the information secured should be so correlated and presented as to make it of use to the National Government for military and postal purposes and for the administration of the Federal aid road act, and to the States for use in perfecting their highway organizations.

Highway engineering education.—There is a scarcity of trained men to carry on highway improvement work under adequate and competent supervision, and an effort should be made, in cooperation with the engineering colleges, to direct the attention of students to the broadening field of usefulness which highway engineering now affords. The assistance rendered should consist of developing and furnishing to colleges material for class instruction and lectures along specialized lines and the issuance of bulletins and the collection of original data necessary to form the foundation for instruction in highway engineering.

Formerly the Bureau of Public Roads pursued its investigations independently. Now it operates practically altogether in cooperation with the State highway departments. The language of the paragraph has therefore been revised to specifically provide for this cooperation and to better indicate the character of the work being done under this item. The words "throughout the United States" are omitted so that, in the development of the Federal aid road work, investigations may be extended to include Alaska, Hawaii, and possibly other outlying possessions of the United States.

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.					Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Bureau of Public Roads—Continued.</i>						
	Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Ex-pended, 1920.	
			<i>Number.</i>	<i>Number.</i>	<i>Number.</i>	
Salaries:						
Chief of division.....per annum..	\$4,500.00		1			
Associate chief of division.....do....	4,200.00		1			
Highway engineer.....do.....	3,300.00		2			
Highway engineer.....do.....	3,000.00		1	1	1	
Highway engineer.....do.....	2,500.00		7	1	1	
Highway engineer.....do.....	2,400.00		1	1	1	
Engineer economist.....do.....	3,000.00		1			
Engineer economist.....do.....	2,500.00		1			
Engineer economist.....do.....	2,400.00		1	1	1	
Highway economist.....do.....	3,000.00		2			
Editorial assistant.....do.....	1,920.00		1	1	1	
Clerk (temporary).....do.....	1,600.00			1	1	
Clerk (temporary).....do.....	1,200.00			2	1	
Mimeograph operator (temporary).....do....	\$40.00			1		
Wages:						
Laborer (temporary).....do.....	720.00			2	2	
			19	11	9	
Salaries.....		\$42,700.00	\$28,560.00	\$24,294.25		
Wages.....			1,440.00	1,443.00		
OTHER OBJECTS OF EXPENDITURE.						
Traveling expenses.....			11,000.00	4,000.00	988.28	
Equipment and material.....			6,500.00	2,000.00	2,179.39	
Miscellaneous items.....			1,000.00	200.00	280.21	
Total.....			61,200.00	36,200.00	29,752.13	

- (56) For investigations of the best methods of road making, especially [ordinary sand-clay and dirt roads, and the best kinds of road-making materials,] *by the use of local materials; for studying the types of mechanical plants and appliances used for road building and maintenance; for studying methods of road repair and maintenance suited to the needs of different localities, and for furnishing expert advice on [road building and maintenance] these subjects [\$102,300]* (acts Mar. 3, 1905, vol. 33, p. 882, sec. 1; May 31, 1920, vol. 41, pp. 722, 723, sec. 1) \$77,300.00

Appropriation for 1912.....	\$60,000	Estimate for 1913.....	\$75,000
Appropriation for 1913.....	75,000	Estimate for 1914.....	164,000
Appropriation for 1914.....	105,000	Estimate for 1915.....	166,330
Appropriation for 1915.....	145,000	Estimate for 1916.....	145,000
Appropriation for 1916.....	145,000	Estimate for 1917.....	142,780
Appropriation for 1917.....	142,780	Estimate for 1918.....	141,780
Appropriation for 1918.....	141,780	Estimate for 1919.....	141,060
Appropriation for 1919.....	141,060	Estimate for 1920.....	138,220
Appropriation for 1920.....	138,220	Estimate for 1921.....	132,300
Appropriation for 1921.....	102,300	Estimate for 1922.....	77,300

NOTE.—There is an apparent decrease in this item of \$25,000, but taking into consideration the transfers to the statutory roll, amounting to \$5,020, the actual decrease is \$19,980. In view of the necessity for recommending increases in the items for road management and for road material investigations (see items 55 and 57), it is believed that this appropriation may be reduced by the amounts suggested without seriously hampering the projects that should be properly undertaken. The reduction is suggested, however, contingent upon the granting of increases in the other items.

The language of the paragraph has been amended by omitting the words "ordinary sand-clay and dirt roads, and the best kinds of road-making materials" and the substitution therefor of the words "by the use of local materials." The following new clauses have also been added: "for studying the types of mechanical plants and appliances used for road building and maintenance; for studying methods of road repair and maintenance suited to the needs of different localities".

It is believed that the substitution of the words "local materials" for "sand-clay and dirt" is desirable, since at present a large mileage of the roads now being built are of gravel construction. The Bureau of Public Roads also wishes to make studies in the West in the building of desert roads, where possibly sand and asphalt will need to be used. The omission of the words "sand-clay and dirt" will not prevent the continuation of studies along those lines, but emphasis will be placed on local materials, whatever their nature.

The inability of the railroads to transport materials in sufficient quantities is making necessary the use of local materials which can be

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
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General Expenses, Bureau of Public Roads—Continued.

hauled by truck. The shortage and high cost of labor also has emphasized the necessity for the development of mechanical equipment to take care of the heavier and more burdensome tasks incident to road building operations, upon which subject there is lack of adequate information. The language of the item has therefore been broadened to cover such investigations.

Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.
Salaries:		Number.	Number.	Number.
Chief engineer (part time).....per annum..	\$4,500.00	1	1	1
Assistant chief engineer (part time)..do....	4,200.00	1	1	1
District engineer (part time).....do....	4,500.00	4	4	4
General inspector.....do....	4,500.00	2	2	2
Bridge engineer.....do....	4,000.00	1	1	1
Bridge engineer.....do....	3,500.00	1	1	1
Bridge engineer.....do....	3,300.00	1	1	1
Highway engineer.....do....	3,000.00	2	2	2
Highway engineer.....do....	2,400.00	2	2	2
Highway engineer.....do....	2,100.00	2	2	2
Superintendent.....do....	2,400.00	1	1	1
Draftsman.....do....	1,980.00	1	1	1
Draftsman.....do....	1,620.00	1	1	1
Chief of road survey party.....do....	2,100.00	2	2	2
Transitmen.....do....	1,800.00	2	2	2
Purchasing agent.....do....	2,500.00			1
Clerks (temporary), \$1,800 to \$720.....do....				19
Messenger boys (temporary).....do....	480.00	4	4	4
Wages:				
Mechanic (temporary).....do....	2,100.00	1	1	1
Charwomen (temporary).....do....	240.00	4	4	4
Miscellaneous temporary labor, \$6 to \$4.....per diem..			5	5
		33	38	58
Salaries.....		\$50,000.00	\$60,000.00	\$67,310.76
Wages.....		2,000.00	3,000.00	4,599.66
OTHER OBJECTS OF EXPENDITURE.				
Stationery.....		5,000.00	6,300.00	4,587.30
Traveling expenses.....		10,000.00	15,000.00	9,405.07
Equipment and material.....		7,500.00	14,000.00	12,846.06
Miscellaneous items.....		2,800.00	4,000.00	4,278.06
Total.....		77,300.00	102,300.00	103,026.91

- (57) For investigations of the chemical and physical character of road materials, for conducting laboratory and field experiments, and for studies and investigations in road design, independently or in cooperation with State highway departments and other agencies **[\$77,020]** (*acts Mar. 3, 1905, vol. 33, p. 882, sec. 1; May 31, 1920, vol. 41, pp. 722, 723, sec. 1*).....\$148,200.00

Appropriation for 1912.....	\$25,000	Estimate for 1913.....	\$25,000
Appropriation for 1913.....	25,000	Estimate for 1914.....	35,580
Appropriation for 1914.....	30,000	Estimate for 1915.....	42,260
Appropriation for 1915.....	36,260	Estimate for 1916.....	34,820
Appropriation for 1916.....	34,820	Estimate for 1917.....	42,780
Appropriation for 1917.....	37,780	Estimate for 1918.....	51,220
Appropriation for 1918.....	51,220	Estimate for 1919.....	51,220
Appropriation for 1919.....	51,220	Estimate for 1920.....	47,020
Appropriation for 1920.....	47,020	Estimate for 1921.....	77,020
Appropriation for 1921.....	77,020	Estimate for 1922.....	148,200

NOTE.—An increase of \$71,180 is recommended in the above item, of which amount \$20,000 is desired for the purchase of new equipment and \$51,180 for additions to the personnel necessary to carry on the proposed investigations.

Transportation by motor vehicles during the past few years has developed with astonishing rapidity, and the use of motor trucks on our highways is certain to become more general in future years. The size and load-carrying capacity of trucks have increased so that tremendous weights are now carried on a single unit. As a result, certain types of roads which have served in the past have been destroyed in a single season. There is no assurance that even the highest types of roads now constructed will successfully carry the heavy traffic that may be expected in the future. Precedents have not yet been established for judging types and designs of roads capable of withstanding such heavy loads.

Large sums of money will be spent throughout the country by Federal, State, and county governments within the next few years for the con-

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
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General Expenses, Bureau of Public Roads—Continued.

struction of systems of highways, and, unless adequate knowledge is gained of the proper methods for designing roads, there will be many failures, resulting in great economic waste. Every possible effort should be made to gain the required scientific information rapidly. Observation of the failure of roads under normal traffic furnishes exceedingly valuable information but requires years of study and the collection and correlation of data to reach definite conclusions regarding the possibilities of various kinds of construction.

The department is faced, therefore, with the necessity of obtaining immediate information through the medium of accelerated tests, some of which are already under way. The department has assumed leadership in the pursuance of investigations in connection with the design of roads and is now looked to by the State and county road officials for new information on road design, so badly needed by them at the present time. A cooperative arrangement has been established with various highway organizations whereby a much larger amount of information on this subject will be secured than would otherwise be possible in a given time.

A comprehensive program of investigations of highway problems has been outlined. As a beginning, investigations under the following heads are contemplated during the coming year: (1) Road subgrades; (2) methods of drainage of roads applicable to various kinds of subgrades, conditions of topography and weather; (3) measurement of impact delivered by motor trucks to roads; (4) effect of impact delivered by motor trucks to road surfaces of different design; (5) effect of truck traffic on different types of road surfaces; (6) relative effect of road surfaces and grades on the cost of haulage; (7) concrete investigations relating to road construction; (8) bridge investigations; (9) standardization of methods of testing bituminous and nonbituminous road materials; (10) effect of variations in methods of manufacture upon the physical and chemical characteristics of bituminous materials as affecting their value for use in the treatment and construction of highways; (11) investigation of non-bituminous road materials; (12) investigations of quarry practice as related to road materials; and (13) equipment.

The investigations now being carried on and those proposed for next year will result in future saving of millions of dollars in the annual maintenance of roads throughout the country, but such results can only be obtained after high-class men and suitable equipment are provided. There is need for additional laboratory equipment as well as special apparatus and testing machinery for use in the field. As most of the work requires field testing, involving large specimens, material for the manufacture of these specimens must be purchased and, in addition, supplies of various kinds for carrying on the tests will be required.

Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.
		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>
Salaries:				
Testing engineer..... per annum..	\$4,500.00	1	1	1
Testing engineer.....do.....	3,300.00	1	1	1
Testing engineer.....do.....	3,000.00	1	1	1
Testing engineer.....do.....	2,400.00	2		
Testing engineer.....do.....	2,000.00	3		
Mechanical engineer.....do.....	4,000.00			1
Mechanical engineer.....do.....	2,000.00	1		
Highway engineer.....do.....	2,400.00	5	1	1
Highway engineer.....do.....	2,000.00	4		
Chemist.....do.....	3,000.00	1	1	1
Chemist.....do.....	2,500.00	1	1	1
Chemist.....do.....	2,400.00	2	2	2
Chemist.....do.....	2,000.00	1		
Chemist.....do.....	1,800.00	1	1	1
Petrographer.....do.....	2,100.00	1	1	1
Laboratory assistant.....do.....	1,500.00	2	2	2
Laboratory assistant.....do.....	1,200.00	9	4	4
Laboratory assistant.....do.....	1,000.00	1	3	1
Geologist.....do.....	3,500.00	1	1	1
Geologist.....do.....	2,400.00	1		
Geologist.....do.....	1,600.00	1		
Computer.....do.....	1,600.00	1	1	1
Clerk.....do.....	1,200.00	2	2	2
Wages:				
Laborers, temporary, \$1,000 to \$900..do.....		6	6	
		49	29	22
Salaries.....		\$100,000.00	\$55,000.00	\$40,912.78
Wages.....		5,000.00	5,000.00	
OTHER OBJECTS OF EXPENDITURE.				
Traveling expenses.....		15,000.00	10,000.00	2,913.79
Equipment and material.....		25,000.00	5,000.00	1,503.07
Miscellaneous items.....		3,200.00	2,020.00	1,159.77
Total.....		148,200.00	77,020.00	46,489.41

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.		
<i>General Expenses, Bureau of Public Roads—Continued.</i>				
(58) [For conducting field experiments and various methods of road construction and maintenance, and investigations concerning various road materials and preparations; for investigating and developing equipment intended for the preparation and application of bituminous and other binders; for] <i>For maintenance and repairs of experimental highways, including the purchase of materials and equipment: for the employment of assistants and labor (acts Mar. 3, 1905, vol. 33, p. 882, sec. 1; May 31, 1920, vol. 41, pp. 722, 723, sec. 1) -----</i>	\$25,000.00			
Appropriation for 1912..... \$10,000	Estimate for 1913..... \$20,000			
Appropriation for 1913..... 30,000	Estimate for 1914..... 60,000			
Appropriation for 1914..... 45,000	Estimate for 1915..... 70,000			
Appropriation for 1915..... 60,000	Estimate for 1916..... 60,000			
Appropriation for 1916..... 60,000	Estimate for 1917..... 60,000			
Appropriation for 1917..... 60,000	Estimate for 1918..... 60,000			
Appropriation for 1918..... 60,000	Estimate for 1919..... 60,000			
Appropriation for 1919..... 60,000	Estimate for 1920..... 60,000			
Appropriation for 1920..... 60,000	Estimate for 1921..... 60,000			
Appropriation for 1921..... 25,000	Estimate for 1922..... 25,000			
<p>NOTE.—The language of this paragraph has been amended as, with the reduction made in the appropriation formerly available for construction and maintenance of experimental roads, it has been necessary to restrict the scope of this work. It is no longer necessary for the department to build sections of experimental roads for purposes of study, as such studies can be made on the Federal-aid roads. It is desirable, however, to continue some of the studies of the experimental roads already built, and authority for their maintenance and repair or minor repairs where sample sections are removed for test purposes from other roads is provided for in the revised language.</p>				
Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.
Salaries: .		Number.	Number.	Number.
Engineer of tests (part time) . . . per annum . . .	\$3,780.00	1	1	.....
Testing engineer..... do.....	2,500.00	1	1	.....
Highway engineer..... do.....	2,100.00	2	2	.....
Superintendent..... do.....	2,400.00	1	1	.....
Mechanical engineer..... do.....	2,400.00	1	1	.....
Collaborator..... per diem.....	2.00	6	6	6
Wages:				
Miscellaneous temporary labor, \$1,050 to \$900..... per annum.....		2	4	4
		14	16	10
Salaries.....		\$2,500.00	\$2,500.00	\$512.80
Wages.....		3,000.00	1,000.00	3,545.00
OTHER OBJECTS OF EXPENDITURE.				
Miscellaneous items.....		19,500.00	9,000.00	23,257.67
Construction work.....			12,500.00	38,051.18
Total.....		25,000.00	25,000.00	65,366.65
<p>NOTE.—No construction work was done during the fiscal year 1920. A contract has been made with Arlington County, Va., for maintenance and construction of roads in that county at a cost to the Government of approximately \$39,000. During fiscal year 1920, 7 miles of road in Arlington County, Va., and 15½ miles in Montgomery County, Md., were maintained at a cost to the department of \$27,315.47.</p>				

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.																																																																																																																																							
<i>General Expenses, Bureau of Public Roads—Continued.</i>																																																																																																																																									
(59) For investigating and reporting upon the utilization of water in farm irrigation, including the best methods to apply in practice; the different kinds of power and appliances, and the development of equipment for farm irrigation; the flow of water in ditches, pipes, and other conduits; the duty, apportionment, and measurement of irrigation water; the customs, regulations, and laws affecting irrigation; for the purchase and installation of equipment for experimental purposes; for the giving of expert advice and assistance; for the preparation and illustration of reports and bulletins on irrigation; for the employment of assistants and labor in the city of Washington and elsewhere; for rent outside of the District of Columbia; and for supplies and all necessary expenses [\$62,440] (<i>acts Mar. 3, 1905, vol. 33, p. 882, sec. 1; May 31, 1920, vol. 41, pp. 722, 723, sec. 1</i>)-----		\$105,000.00																																																																																																																																							
Appropriation for 1912..... \$100,000	Estimate for 1913..... \$98,300																																																																																																																																								
Appropriation for 1913..... 98,300	Estimate for 1914..... 116,250																																																																																																																																								
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Appropriation for 1921..... 62,440	Estimate for 1922..... 105,000																																																																																																																																								
<p>NOTE.—There is an increase in this item of \$42,560. The appropriation for irrigation investigations has been reduced \$40,000 since 1918, so that the increase requested will merely enable the department to resume work which it has been necessary to suspend because of shortage of funds. The Department of Agriculture is the only Federal agency engaged in research work in irrigation practices and methods. Studies of the movement of soil moisture so far made have revealed the fact that there is a great dearth of information regarding this subject. These investigations, the results of which are of such great practical value to the irrigation farmer, should be resumed and extended. In the past several years an investigation of the flow of water in various forms of irrigation conduits has been made to determine the friction losses, the results of which have had valuable application to irrigation systems. These studies so far have covered irrigation canals, wood pipe, and concrete pipe and should be enlarged to include various kinds of metal pipes and flumes. Problems in the handling of silt-laden irrigation water and the removal of silt deposits should be investigated, and greater attention should be given to the proper design and economical operation of pumping plants.</p>																																																																																																																																									
<table><tr><th>Employees.</th><th>Rate.</th><th>Estimated, 1922.</th><th>Appropriated, 1921.</th><th>Expended, 1920.</th></tr><tr><td>Salaries:</td><td></td><td><i>Number.</i></td><td><i>Number.</i></td><td><i>Number.</i></td></tr><tr><td>Associate chief of division.....per annum..</td><td>\$4,200.00</td><td>1</td><td></td><td></td></tr><tr><td>Chief, irrigation investigations.....do.....</td><td>4,000.00</td><td></td><td>1</td><td>1</td></tr><tr><td>Irrigation economist.....do.....</td><td>2,400.00</td><td>1</td><td>1</td><td>1</td></tr><tr><td>Irrigation economist.....do.....</td><td>1,980.00</td><td>1</td><td>1</td><td>1</td></tr><tr><td>Irrigation engineer.....do.....</td><td>3,000.00</td><td>3</td><td>2</td><td>2</td></tr><tr><td>Irrigation engineer.....do.....</td><td>2,500.00</td><td>3</td><td>1</td><td>1</td></tr><tr><td>Irrigation engineer.....do.....</td><td>2,400.00</td><td>2</td><td>2</td><td>2</td></tr><tr><td>Irrigation engineer.....do.....</td><td>2,280.00</td><td>3</td><td>3</td><td>3</td></tr><tr><td>Irrigation engineer.....do.....</td><td>2,000.00</td><td></td><td>1</td><td>1</td></tr><tr><td>Irrigation engineer.....do.....</td><td>1,980.00</td><td>3</td><td>1</td><td>1</td></tr><tr><td>Irrigation engineer.....do.....</td><td>1,920.00</td><td></td><td>1</td><td>1</td></tr><tr><td>Irrigation engineer.....do.....</td><td>1,800.00</td><td>4</td><td>4</td><td>4</td></tr><tr><td>Irrigation engineer.....do.....</td><td>1,500.00</td><td>3</td><td></td><td></td></tr><tr><td>Irrigation engineer.....do.....</td><td>1,000.00</td><td>1</td><td>1</td><td>1</td></tr><tr><td>Irrigation manager.....do.....</td><td>1,500.00</td><td>1</td><td>1</td><td>1</td></tr><tr><td>Drainage engineer.....do.....</td><td>3,000.00</td><td>1</td><td>1</td><td>1</td></tr><tr><td>Drainage engineer.....do.....</td><td>2,100.00</td><td>1</td><td>1</td><td>1</td></tr><tr><td>Agent.....do.....</td><td>1,200.00</td><td>1</td><td>1</td><td>1</td></tr><tr><td></td><td></td><td>29</td><td>23</td><td>23</td></tr><tr><td>Salaries.....</td><td></td><td>\$63,160.00</td><td>\$50,000.00</td><td>\$60,465.73</td></tr><tr><td colspan="5">OTHER OBJECTS OF EXPENDITURE.</td></tr><tr><td>Traveling expenses.....</td><td></td><td>37,000.00</td><td>12,440.00</td><td>19,953.65</td></tr><tr><td>Equipment and material.....</td><td></td><td>3,660.00</td><td></td><td>401.87</td></tr><tr><td>Miscellaneous items.....</td><td></td><td>1,180.00</td><td></td><td>2,240.66</td></tr><tr><td>Total.....</td><td></td><td>105,000.00</td><td>62,440.00</td><td>83,061.91</td></tr></table>	Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.	Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>	Associate chief of division.....per annum..	\$4,200.00	1			Chief, irrigation investigations.....do.....	4,000.00		1	1	Irrigation economist.....do.....	2,400.00	1	1	1	Irrigation economist.....do.....	1,980.00	1	1	1	Irrigation engineer.....do.....	3,000.00	3	2	2	Irrigation engineer.....do.....	2,500.00	3	1	1	Irrigation engineer.....do.....	2,400.00	2	2	2	Irrigation engineer.....do.....	2,280.00	3	3	3	Irrigation engineer.....do.....	2,000.00		1	1	Irrigation engineer.....do.....	1,980.00	3	1	1	Irrigation engineer.....do.....	1,920.00		1	1	Irrigation engineer.....do.....	1,800.00	4	4	4	Irrigation engineer.....do.....	1,500.00	3			Irrigation engineer.....do.....	1,000.00	1	1	1	Irrigation manager.....do.....	1,500.00	1	1	1	Drainage engineer.....do.....	3,000.00	1	1	1	Drainage engineer.....do.....	2,100.00	1	1	1	Agent.....do.....	1,200.00	1	1	1			29	23	23	Salaries.....		\$63,160.00	\$50,000.00	\$60,465.73	OTHER OBJECTS OF EXPENDITURE.					Traveling expenses.....		37,000.00	12,440.00	19,953.65	Equipment and material.....		3,660.00		401.87	Miscellaneous items.....		1,180.00		2,240.66	Total.....		105,000.00	62,440.00	83,061.91		
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Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Bureau of Public Roads—Continued.</i>		
(60) For investigating and reporting upon farm drainage and upon the drainage of swamp and other wet lands which may be made available for agricultural purposes; for preparing plans for the removal of surplus water by drainage, and for giving expert assistance by advice or otherwise in the drainage of such lands; for conducting field experiments and investigations concerning the construction and maintenance of farm-drainage work; for investigating and developing equipment intended for the construction and maintenance of farm-drainage structures; for the purchase of materials and equipment; and for preparing and illustrating reports and bulletins on drainage; and for the employment of assistants and labor in the city of Washington and elsewhere; for rent outside of the District of Columbia, and for supplies and all necessary expenses [\$53,760] (<i>acts Mar. 3, 1905, vol. 33, p. 882, sec. 1; May 31, 1920, vol. 41, pp. 722, 723, sec. 1</i>) -----	\$95,000.00	
Appropriation for 1912..... \$100,000 Appropriation for 1913..... 100,000 Appropriation for 1914..... 97,600 Appropriation for 1915..... 96,280 Appropriation for 1916..... 96,280 Appropriation for 1917..... 94,720 Appropriation for 1918..... 93,760 Appropriation for 1919..... 73,760 Appropriation for 1920..... 73,760 Appropriation for 1921..... 53,760	Estimate for 1913..... \$96,700 Estimate for 1914..... 97,600 Estimate for 1915..... 96,280 Estimate for 1916..... 96,280 Estimate for 1917..... 94,720 Estimate for 1918..... 93,760 Estimate for 1919..... 93,760 Estimate for 1920..... 73,760 Estimate for 1921..... 103,760 Estimate for 1922..... 95,000	
<p>NOTE.—The increase of \$41,240 requested in this item will merely restore the amount to its prewar basis, the item having been reduced \$40,000 since 1918.</p> <p>Under the present limited appropriation, the department has been unable to respond to the numerous and insistent calls from farmers for assistance and advice in connection with their drainage problems. The benefits of properly constructed tile drainage and terrace systems, now well recognized in some States, should be demonstrated in other sections where these methods of improving and conserving the soil are not largely practiced. Community drainage projects, involving the drainage of swamp and overflowed land, often suffer from the inexperience and faulty methods of the engineers in charge. Within the past year, by careful review of the plans of certain drainage districts, the department has been able to suggest changes which will save to landowners a sum amounting to several times the entire appropriation for drainage investigations.</p> <p>A number of research projects should also be continued and enlarged, among which may be mentioned the matter of depth and spacing of tile drains. It is estimated that the ultimate saving to landowners due to increased spacing of tile lines will exceed the aggregate of the money expended for drainage investigations since the organization of the work. Valuable data along these lines have already been obtained in regard to certain soil types in Alabama and North Carolina, and similar investigations should be conducted with respect to other soil types and the results given wide publicity. Another project that should be continued and extended is that relating to soil erosion and gullying. The annual loss to agriculture from this cause has been estimated at \$100,000,000. The efficacy of terraces and other devices for correcting and preventing erosion has been fully demonstrated and is well recognized in some sections, but studies should be made of the best designs and practices adapted to other localities and the results widely disseminated. Other problems that require more serious attention than has been possible with the limited funds available include the proper diameter of tile, maintenance of dredged ditches, and the drainage of muck and peat lands. The muck and peat areas of the United States constitute one of the most extensive types of agricultural land that remain undeveloped. The problems connected with their drainage are complex. Comprehensive work for the purpose of determining the shrinkage and other properties of muck after drainage should be undertaken and continued until conclusive information is obtained.</p>		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.					Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Bureau of Public Roads—Continued.</i>						
Employees.	Rate.	Esti- mated, 1922.	Appro- priated, 1921.	Ex- pended, 1920.		
Salaries:		Number.	Number.	Number.		
Chief of division (part time)...per annum..	\$4,500.00	1				
Chief of drainage investigation.....do....	4,000.00		1	1		
Drainage engineer.....do....	3,000.00	2	2	2		
Drainage engineer.....do....	2,640.00			1		
Drainage engineer.....do....	2,500.00	8	8	9		
Drainage engineer.....do....	2,220.00	2	1	1		
Drainage engineer.....do....	2,100.00	6	4	6		
Drainage engineer.....do....	1,680.00	6	1	2		
Drainage engineer.....do....	1,380.00			1		
Drainage engineer (part time)...per diem..	10.50	2	2	2		
Agricultural engineer.....per annum..	1,200.00	1	1	1		
Agent (part time).....per diem..	6.50	1	1	1		
Collaborators, \$35 to \$12.....per month..		4	3	4		
Wages:						
Laborers, \$35 to \$30.....do....		4	1	4		
		37	25	35		
Salaries.....		\$59,890.00	\$39,600.00	\$51,360.22		
Wages.....		1,680.00	400.00	1,680.00		
OTHER OBJECTS OF EXPENDITURE.						
Traveling expenses.....		30,000.00	13,760.00	17,238.03		
Equipment and material.....		2,000.00		2,478.61		
Miscellaneous items.....		1,430.00		1,452.52		
Total.....		95,000.00	53,760.00	74,209.38		
(61) For supervising the preparation, distribution, and use of picric acid, T. N. T., trojan powder, and such other surplus war explosives as may be made available for use in clearing stumps and stumps from agricultural land, independently or in cooperation with agricultural colleges and other agencies; and for investigating and reporting upon the results obtained from the use of the explosives (submitted).....					\$25,000.00	
NOTE.—This is a new item. The department has been advised that approximately 10,000,000 pounds of picric acid can be made available from the war surplus. This explosive is suitable for land clearing operations in that it is both effective and safe to handle. Landowners, State agricultural colleges, or other users of the explosives will be required to pay the cost of cartridging, boxing, transporting, and using the explosives, and keep and make available to the department prescribed records. The only cost to the department will be that of supervising the preparation, distribution, and use of the explosives. This can be done with a relatively small force. The expenditure will, of course, be governed by the amount of explosives that may be made available for this purpose.						
Employees.	Rate.	Esti- mated, 1922.	Appro- priated, 1921. ¹	Ex- pended, 1920. ¹		
Salaries:		Number.	Number.	Number.		
Agricultural engineer.....per annum..	\$3,300.00	1				
Agricultural engineer.....do....	2,500.00	3				
Agricultural engineer.....do....	2,100.00	3				
		7				
Salaries.....		\$17,100.00				
OTHER OBJECTS OF EXPENDITURE.						
Traveling expenses.....		5,000.00				
Miscellaneous items.....		2,900.00				
Total.....		25,000.00				
¹ No appropriations for fiscal years 1920 and 1921.						
(62) [For investigating farm domestic water supply and drainage disposal, the construction of farm buildings, and other rural engineering problems involving mechanical principles, including the erection of such structures outside of the District of Columbia as may be necessary for experimental purposes only, the employment of labor in the city of Washington and elsewhere, supplies, and all other necessary expenses, \$25,000.]						

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Bureau of Public Roads—Continued.</i>		
(63) <i>For investigating and reporting upon, independently or in cooperation with the State agricultural colleges or other agencies, engineering problems pertaining to agriculture, including the construction, capacity, use and operation of farm implements, farm machinery, tractors, and motor trucks and motive power for farm purposes, the construction, heating, lighting, ventilation and equipment of farm dwellings and other farm structures with special reference to economizing material and labor and the betterment of living conditions, farm water supply and drainage disposal; the design of structures and apparatus for the use of the Department of Agriculture in experimental work; and for the preparation and illustration of bulletins relating to these subjects, the purchase and installation of equipment for experimental purposes, the erection of such structures outside of the District of Columbia as may be necessary for experimental purposes only, the employment of assistants and labor in the District of Columbia and elsewhere, rent outside the District of Columbia, and the purchase of supplies and all other necessary expenses, \$100,000, of which \$10,000 shall be immediately available (submitted).....</i>		
Appropriation for 1916..... \$12,805	Estimate for 1917..... \$27,000	
Appropriation for 1917..... 20,000	Estimate for 1918..... 30,000	
Appropriation for 1918..... 25,000	Estimate for 1919..... 60,900	
Appropriation for 1919..... 25,000	Estimate for 1920..... 75,000	
Appropriation for 1920..... 25,000	Estimate for 1921..... 100,000	
Appropriation for 1921..... 25,000	Estimate for 1922..... 100,000	
<p>NOTE.—This item is proposed as a substitute for item 62, as the language of the latter item does not clearly indicate the specific projects which the department has under way and desires to develop. The new item is an attempt to set out more definitely the purposes of the work.</p> <p>The amount of this appropriation has been increased by \$75,000, which it is proposed to use for investigations of (1) farm power, (2) farm implements, (3) farm buildings, (4) farm home equipment, and (5) for cooperation with other bureaus of the department, State agricultural colleges, and other agencies.</p> <p>(1) <i>Farm power.</i>—It is highly desirable that there be brought about a more efficient and more complete utilization of power on the farm. It is proposed to expend approximately 60 per cent of the appropriation on farm power projects. More particularly they would include:</p> <p>(a) <i>Testing and rating of farm tractors.</i>—In 1919, 150,000 tractors were purchased, at a total cost of approximately \$200,000,000. It is probable that a greater number have been purchased in 1920. The department has made no detailed study of tractors and has very little data in regard to the conditions under which their use should be encouraged or discouraged. It is highly desirable that experiments, investigations, and tests be undertaken, so that the department may be in position to give farmers advice and assistance which will enable those who can use tractors profitably to select the type best suited to their needs and enable them to use it to the best advantage. There is a general demand for the testing and rating of farm tractors. At least one State has undertaken to supply this demand, and requires that all makes of tractors which are to be sold in the State be tested and their capacity certified before they can be placed on sale. It is desirable to standardize the testing of tractors, so that the results of the tests will be accepted throughout the United States, and the only logical method of handling this work is for the Federal Government to make the tests, either independently or in cooperation with State institutions. If different requirements are established by the individual States, necessitating changes in each type of tractor, the result will be increased cost of manufacturing without increased efficiency. Both the manufacturers and the users of tractors are concerned in avoiding unnecessary expense of varying requirements. The testing and rating of farm tractors will include field and laboratory tests for the purpose of determining the belt or brake horsepower and the drawbar horsepower, as well as the fuel consumption of the tractor. These tests will be made under varying load conditions. The tractors will be operated at the speeds recommended by the manufacturer. There will be an endurance test for the purpose of showing any defects that may exist, and also to determine whether the rated load can be secured under conditions of continuous operation. It is proposed to issue a card showing the rating of tractors.</p>		
	\$100,000.00	

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<p><i>General Expenses, Bureau of Public Roads—Continued.</i></p> <p>(b) Measurement of power requirements of machines and implements.—These measurements will be made under varying conditions arising in farm practice and will include the principal types of field and stationary machinery. Information will be secured in regard to their capacity, power requirements, and efficiency.</p> <p>(c) Development of practical methods of expanding the power of farm horses.—Methods will be studied looking to the more economical, efficient, and complete utilization of the horse power existing on the farm, including the use of 4, 5, and 8 horse teams and the utilization of horses as auxiliary power units.</p> <p>(d) Determination by field studies of the mechanical efficiency of horses as power units by the application to field conditions of the principles worked out in the investigations mentioned above.</p> <p>(e) Cooperation with the Bureau of Animal Industry and the Office of Farm Management and Farm Economics, as well as with State institutions, in the development of plans for increasing the economic efficiency of horse and tractor power by the readjustment of the size of the farm and the combination of enterprises, in investigating the respective fields in which animals and mechanical power can be used, in studying the relative profitableness of the different forms of power in the fields in which they compete, and in compiling accurate data concerning farm power demands and the relative cost of meeting these demands with the various kinds of power on the farm.</p> <p>(2) <i>Farm implements.</i>—Investigations in regard to the use and operation of farm implements and farm machinery should be made, so that farmers will have accurate information in regard to the capacity, power, requirements, and efficiency of the different types of implements and machines.</p> <p>(3) <i>Farm buildings.</i>—Investigations of farm building construction should be carried on to enable those who are planning their own homes, and those agencies which are furnishing building plans and material to farmers, to properly provide for the requirements of farm structures of all kinds. These studies will include investigations to determine the most economical type of buildings and materials for construction under varying conditions, problems of heating, lighting, and ventilating farm homes and farm buildings, the grouping of the buildings on the farmstead, etc.</p> <p>(4) <i>Farm home equipment.</i>—The equipment of farm homes with labor-saving devices, especially those involving the use of small power units, is of very great importance since the scarcity and high prices of farm labor are not confined to man power, and it is highly essential that the burdens of the farm housewife be lightened in order that the farm home life may be made as attractive and wholesome as possible.</p> <p>(5) A large number of requests for information or assistance along agricultural engineering lines have been received from individuals, State colleges, and other sources. The plans for sweet-potato houses, prepared in cooperation with the Bureaus of Plant Industry and Markets were widely distributed, and a number of houses were built from these plans. Reports from owners show very small loss from deterioration of the potatoes while in storage, the saving thus effected having been sufficient, in many instances, to more than pay for the cost of constructing the house. It is desired to extend this type of service.</p> <p>Much of the work relating to farm mechanical problems has been carried on in cooperation with other bureaus of the department, with State colleges, the American Society of Agricultural Engineers, and other agencies. It is planned to continue this policy in the future, as it results in the most effective use of all available resources.</p> <p>It is recommended that \$10,000 of the total appropriation be made immediately available, so that the farm power and tractor testing work can be organized in the early spring. In undertaking this work it will be necessary first to develop the necessary organization, and to arrange for the purchase of certain equipment. This should be done at the earliest possible moment in order to make the work effective during the coming crop season. If it is necessary to wait until July 1 before funds are made available, it is not likely that much can be accomplished during the next calendar year.</p>		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.					Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Bureau of Public Roads—Continued.</i>						
Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.		
Salaries:		Number.	Number.	Number.		
Chief of division (part time) . . . per annum . . .	\$4,500.00	1	1	1		
Architect do . . .	3,500.00	1	1	1		
Architect do . . .	3,000.00			1		
Mechanical engineer do . . .	3,000.00		1	1		
Agricultural engineer do . . .	3,000.00	2				
Agricultural engineer do . . .	2,640.00	2				
Agricultural engineer do . . .	2,500.00	1	2			
Agricultural engineer do . . .	2,400.00	4	1	2		
Agricultural engineer do . . .	2,100.00	4		1		
Agricultural engineer do . . .	1,800.00	4				
Estimator do . . .	1,800.00		1	1		
Draftsman do . . .	2,220.00	1	1			
Draftsman do . . .	2,100.00	1				
Draftsman do . . .	1,900.00		1	1		
Draftsman do . . .	1,800.00	2	1	1		
Draftsman do . . .	1,500.00	3				
Scientific assistant do . . .	2,280.00			1		
Assistant do . . .	1,800.00	1	1	1		
Clerk do . . .	1,680.00	1				
		28	11	11		
Salaries		\$63,420.00	\$22,500.00	\$20,954.32		
OTHER OBJECTS OF EXPENDITURE.						
Traveling expenses		20,000.00	2,500.00	1,879.43		
Equipment and material		12,000.00		717.22		
Miscellaneous items		4,580.00		125.48		
Total		100,000.00	25,000.00	23,676.45		
(64) For general administrative expenses connected with the above-mentioned lines of investigations and experiments (acts Mar. 3, 1905, vol. 33, p. 882, sec. 1; May 31, 1920, vol. 41, pp. 722, 723, sec. 1)					\$16,000.00	
Appropriation for 1912	\$11,700	Estimate for 1913	\$10,100			
Appropriation for 1913	10,100	Estimate for 1914	15,100			
Appropriation for 1914	12,000	Estimate for 1915	14,000			
Appropriation for 1915	14,000	Estimate for 1916	12,600			
Appropriation for 1916	12,600	Estimate for 1917	12,600			
Appropriation for 1917	12,600	Estimate for 1918	16,000			
Appropriation for 1918	16,000	Estimate for 1919	16,000			
Appropriation for 1919	16,000	Estimate for 1920	16,000			
Appropriation for 1920	16,000	Estimate for 1921	16,000			
Appropriation for 1921	16,000	Estimate for 1922	16,000			
Other objects of expenditure.		Estimated, 1922.	Appropriated, 1921.	Expended, 1920.		
Stationery	\$4,000.00	\$3,500.00	\$3,051.05			
Equipment and material	1,000.00	750.00	755.85			
Telephone and telegraph service	3,000.00	3,500.00	2,393.37			
Miscellaneous items	8,000.00	8,250.00	7,477.41			
Total	16,000.00	16,000.00	13,680.68			
In all, for general expenses					\$652,700.00	\$397,720.00
Appropriations for 1912	\$126,700	Estimates for 1913	\$189,456			
Appropriations for 1913	165,100	Estimates for 1914	331,820			
Appropriations for 1914	232,000	Estimates for 1915	341,390			
Appropriations for 1915	300,000	Estimates for 1916	597,700			
Appropriations for 1916	510,505	Estimates for 1917	523,625			
Appropriations for 1917	510,820	Estimates for 1918	611,240			
Appropriations for 1918	606,240	Estimates for 1919	565,420			
Appropriations for 1919	489,520	Estimates for 1920	530,680			
Appropriations for 1920	480,680	Estimates for 1921	627,720			
Appropriations for 1921	397,720	Estimates for 1922	652,700			

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.														
<p><i>Laboratory Building, Arlington Farm—</i></p> <p>(65) <i>To supplement the \$75,000 appropriation now available for the construction of a laboratory building on the Arlington Farm property of the Department of Agriculture as permanent headquarters for the testing and research work of the Bureau of Public Roads (submitted)</i> -----</p> <p>NOTE.—An appropriation of \$75,000 was provided in the Agricultural appropriation act for the fiscal year 1918 for the erection and equipment of a laboratory building at the Arlington Farm. Conditions incident to the war made it impossible to initiate construction work at that time, and, under present increased costs of labor and materials, the original appropriation of \$75,000 will be insufficient to provide adequate and permanent quarters for the testing and research work of the Bureau of Public Roads. It is proposed to build a very plain, two-story, reinforced concrete, semifactory type of structure, approximately 75 by 150 feet (contents, 410,000 cubic feet).</p> <p>At the present time the laboratory and shop work of the bureau is divided between two chemical laboratories and a microscopic laboratory on the eighth floor of the Willard Building, the physical laboratories on the ground floor and in the basement of the building, a machine shop on the ground floor, and a photographic laboratory on the fourth floor. The work of the Division of Tests is very greatly hampered through lack of sufficient floor space and proper equipment. Unless proper housing facilities and equipment are provided in the near future much valuable time will be lost in obtaining results from these investigations. The Division of Agricultural Engineering has no laboratory in which to carry on necessary experiments and studies of farm equipment and make tests and ratings of farm machinery.</p> <p><i>Statement of clerks employed in District of Columbia under lump-fund appropriations for 30 days or more during the fiscal year ended June 30, 1920 (32 Stat., p. 303).</i></p> <p>GENERAL EXPENSES, BUREAU OF PUBLIC ROADS.</p> <table><tr><td>1 clerk, \$2,500 per annum.</td><td>1 clerk, \$1,320 per annum.</td></tr><tr><td>1 clerk, \$1,800 per annum.</td><td>9 clerks, at \$1,200 each per annum.</td></tr><tr><td>3 clerks, at \$1,600 each per annum.</td><td>3 clerks, at \$1,100 each per annum.</td></tr><tr><td>2 clerks, at \$1,500 each per annum.</td><td>1 clerk, \$1,000 per annum.</td></tr><tr><td>1 clerk, \$1,440 per annum.</td><td>1 clerk, \$900 per annum.</td></tr><tr><td>1 clerk, \$1,400 per annum.</td><td>1 clerk, \$720 per annum.</td></tr><tr><td>1 clerk, \$1,380 per annum.</td><td></td></tr></table>	1 clerk, \$2,500 per annum.	1 clerk, \$1,320 per annum.	1 clerk, \$1,800 per annum.	9 clerks, at \$1,200 each per annum.	3 clerks, at \$1,600 each per annum.	3 clerks, at \$1,100 each per annum.	2 clerks, at \$1,500 each per annum.	1 clerk, \$1,000 per annum.	1 clerk, \$1,440 per annum.	1 clerk, \$900 per annum.	1 clerk, \$1,400 per annum.	1 clerk, \$720 per annum.	1 clerk, \$1,380 per annum.		<p>\$75, 000. 00</p>	
1 clerk, \$2,500 per annum.	1 clerk, \$1,320 per annum.															
1 clerk, \$1,800 per annum.	9 clerks, at \$1,200 each per annum.															
3 clerks, at \$1,600 each per annum.	3 clerks, at \$1,100 each per annum.															
2 clerks, at \$1,500 each per annum.	1 clerk, \$1,000 per annum.															
1 clerk, \$1,440 per annum.	1 clerk, \$900 per annum.															
1 clerk, \$1,400 per annum.	1 clerk, \$720 per annum.															
1 clerk, \$1,380 per annum.																
<p>Total for Bureau of Public Roads -----</p>	<p>848, 420. 00</p>	<p>\$515, 020. 00</p>														

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<p align="center">BUREAU OF MARKETS AND CROP ESTIMATES.</p> <p>NOTE.—It is proposed to consolidate the Bureaus of Markets and Crop Estimates. This will result in many advantages. The organization and personnel of the two bureaus can be more economically administered and utilized. The confusion in the public mind relative to the division of work between the Bureau of Crop Estimates and the Bureau of Markets will be avoided. Crop reports and market reports can be published together instead of separately so that farmers and business men will have the whole story in one publication. The leased telegraph wires of the Bureau of Markets can be utilized for transmitting crop information to Washington and for the prompt dissemination of crop reports. More efficient and satisfactory cooperation can be effected with marketing agencies and farmers' organizations, because it will be easier to establish satisfactory cooperative relations with one bureau dealing with both supply and demand problems.</p> <p>In some States the branch offices of the two bureaus can be brought together in the same quarters. In many instances the same crop and live-stock specialists can serve both bureaus. This is true not only of those employed in this country but also of those assigned to foreign countries to collect and transmit first-hand information regarding production, consumption, surpluses, and deficits of agricultural products in the principal countries of the world. The specialists working along statistical and economic lines in both bureaus can be brought together in a statistical research unit to handle the statistics of consumption, production, imports and exports, surpluses and deficits, and farm and market prices of agricultural products for all countries. The editorial, and other clerical and subclerical assistance, stenographers, accountants, draftsmen, etc., can be utilized to better advantage. The duplicating and mailing services of both bureaus can be combined, as well as the purchase, custody, distribution, and utilization of supplies and equipment.</p> <p>The legal authority of the two bureaus now clearly overlaps. Consolidation will at once remove any tendency toward duplication of work and make possible complete coordination of effort.</p> <p><i>Salaries, Bureau of Markets and Crop Estimates—</i></p> <p>(1) One chief of bureau (increase of \$2,500) (<i>R. S., p. 87, secs. 520-523; acts Mar. 4, 1913, vol. 37, p. 854, sec. 1; May 31, 1920, vol. 41, p. 723, sec. 1</i>) -----</p> <p align="right">\$7, 500. 00</p> <p>NOTE.—An increase of \$2,500 is recommended in the salary of the chief of bureau. See note under item 1, page 19.</p> <p>(2) 【One chief clerk, \$2,000.】</p> <p>NOTE.—See note under item 8.</p> <p>(3) One administrative assistant (<i>same acts</i>) -----</p> <p align="right">3, 000. 00</p> <p>(4) One administrative assistant (<i>same acts</i>) -----</p> <p align="right">2, 500. 00</p> <p>(5) One administrative assistant (by transfer from Bureau of Crop Estimates, with increase of \$600 and change of title) (<i>same acts</i>) -----</p> <p align="right">2, 400. 00</p> <p>NOTE.—This position is created by the transfer of the present chief clerk of the Bureau of Crop Estimates, whose services will be needed as heretofore in connection with the administration of the crop-estimating work. This employee performs very responsible executive duties for which, under present conditions, \$1,800 is not regarded as fair compensation. He has been in the department 10 years and has received no promotion since October 1, 1913.</p> <p>The change in title to administrative assistant is desirable if the recommendation that the Bureau of Crop Estimates be discontinued as a separate unit is approved.</p> <p>All the positions on the present statutory roll of the Bureau of Crop Estimates, except such as are being dropped incident to the readjustment of places indicated in the note under item 13, together with the new places recommended, will be absolutely necessary for the continuation and proper development of the crop-estimating work. Provision is therefore being made in the estimates for the transfer of all such places in connection with the consolidation of the Bureau of Crop Estimates with the Bureau of Markets.</p>		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>Salaries, Bureau of Markets and Crop Estimates—Continued.</i>		
(6) 【One clerk in charge of supplies and accounts, \$2,250.】		
NOTE.—See note under item 7.		
(7) One executive clerk (<i>submitted</i>) -----	\$2, 250. 00	
NOTE.—One executive clerk at \$2,250 is recommended in lieu of one clerk in charge of supplies and accounts at the same salary. This change in designation is desirable in order to bring about uniformity in the titles of positions involving like responsibility. It will also afford greater flexibility in filling vacancies.		
(8) Six executive clerks, at \$2,000 each (increase of 3) (<i>R. S., p. 87, secs. 520–523; acts Mar. 4, 1913, vol. 37, p. 854, sec. 1; May 31, 1920, vol. 41, p. 723, sec. 1</i>)-----	12, 000. 00	
NOTE.—These three additional places are submitted in lieu of one chief clerk, \$2,000, and two clerks at \$2,000 each (items 2 and 9). These are merely changes of designation and are recommended for the purpose of bringing about uniformity in the titles of positions involving like responsibility and to afford greater latitude in filling vacancies. The organization of the Bureau of Markets is such that the duties ordinarily assigned to a chief clerk are performed largely by other administrative sections.		
(9) 【Two clerks, at \$2,000 each.】		
NOTE.—See note under item 8.		
(10) 【One executive assistant, \$1,980.】		
NOTE.—See note under item 11.		
(11) Three executive clerks, at \$1,980 each (1 by transfer from lump fund and 2 new places) (<i>same acts</i>) -----	5, 940. 00	
NOTE.—These two additional places are submitted in lieu of one executive assistant and one administrative assistant at \$1,980 each (items 10 and 12). This recommendation involves only changes in designation which are desirable to bring about uniformity in the titles of positions carrying like responsibility.		
(12) 【One administrative assistant, \$1,980.】		
NOTE.—See note under item 11.		
(13) Twenty-six clerks, class 4 (increase of 15, 6 by transfer from Bureau of Crop Estimates and 9 new places) (<i>same acts</i>) --	46, 800. 00	
NOTE.—If the Bureau of Crop Estimates had been continued as a separate unit, a readjustment of its clerical and subclerical positions would have been essential to insure maximum efficiency. The bureau is burdened with a number of low-salaried positions which it has been possible to fill with only the least desirable of the civil-service eligibles, whereas the work of the bureau requires the services of statistical clerks of more than average proficiency. The number of clerks now employed is insufficient, and the present crop-estimating work can not be properly performed until the deficiency in clerical personnel is made good. In order to remedy this situation it is proposed to substitute 9 clerks of class 4, 10 of class 3, 17 of class 2, 11 of class 1, 1 skilled laborer at \$1,200, 2 messengers at \$900 each, and 1 charwoman at \$360, or 51 places, aggregating \$72,560, for 1 clerk at \$1,300, 15 clerks at \$900 each, 3 messengers or laborers at \$720 each, and 1 charwoman, \$240, or 20 places, aggregating \$17,200; that is, a net increase of 31 places and of \$55,360 in total salaries. (See items 13, 15, 19, 23, 54, 62, and 70.)		
(14) One clerk (<i>same acts</i>)-----	1, 740. 00	

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>Salaries, Bureau of Markets and Crop Estimates—Continued.</i>		
(15) Forty-one clerks, class 3 (increase of 26, 1 by transfer from lump fund, 9 by transfer from Bureau of Crop Estimates, and 16 new places) (<i>R. S.</i> , p. 87, secs. 520-523; <i>acts Mar. 4, 1913</i> , vol. 37, p. 854, sec. 1; <i>May 31, 1920</i> , vol. 41, p. 723, sec. 1) \$65, 600. 00		
NOTE.—Ten of the new places requested in this grade are involved in the salary readjustment of the Bureau of Crop Estimates, as explained in the note under item 13. The remaining 6 places and 10 clerks of class 2 (item 19) are submitted in connection with a slight readjustment of the statutory roll of the Bureau of Markets. If these 16 places, with salaries aggregating \$23,600, are allowed, it will be possible to drop 22 clerical places at \$1,000 (item 26). This will involve an increase of only \$1,600 and permit the bureau to retain its competent clerks. The \$1,000 places are continually vacant, as it is impossible to hold satisfactory clerical help at this salary. The bureau has lost some of its best clerks through inability to promote them, and this readjustment is recommended in the hope of securing and retaining clerical employees capable of performing the high grade of service required of them.		
(16) Three clerks, at \$1,560 each (by transfer from lump fund) (<i>same acts</i>)..... 4, 680. 00		
(17) One clerk (<i>same acts</i>)..... 1, 500. 00		
(18) One clerk (<i>same acts</i>)..... 1, 440. 00		
(19) Eighty-two clerks, class 2 (increase of 47, 5 by transfer from lump fund, 15 by transfer from Bureau of Crop Estimates, and 27 new places) (<i>same acts</i>)..... 114, 800. 00		
NOTE.—See notes under items 13 and 15.		
(20) Two clerks, at \$1,380 each (increase of 1 by transfer from lump fund) (<i>same acts</i>)..... 2, 760. 00		
(21) Six clerks, at \$1,320 each (increase of 1) (<i>same acts</i>)..... 7, 920. 00		
NOTE.—These additional places, seven clerks, class 1, and one clerk, \$1,080 (items 23 and 27), are submitted in lieu of one telegraph operator at \$1,320, seven at \$1,200, and one at \$1,080 (items 35, 36, and 37), this readjustment involving merely a change in designation. It is impossible to obtain competent telegraph operators at the salaries provided, and the change in designation will permit the transfer of nine clerks now carried on lump-fund rolls without the necessity of requesting additional statutory places.		
(22) One clerk (<i>same acts</i>)..... 1, 300. 00		
(23) Two hundred and thirty-one clerks, class 1 (increase of 58, 40 by transfer from Bureau of Crop Estimates and 18 new places) (<i>same acts</i>)..... 277, 200. 00		
NOTE.—Eleven of the new places recommended in this grade are involved in the readjustment of the statutory roll of the Bureau of Crop Estimates. The seven remaining places are submitted in lieu of seven telegraph operators at the same salary. (See notes under items 13 and 21.)		
(24) One clerk (<i>same acts</i>)..... 1, 140. 00		
(25) Seventy-nine clerks, at \$1,100 each (increase of 14 by transfer from lump fund) (<i>same acts</i>)..... 86, 900. 00		
(26) Eighty-two clerks, at \$1,000 each (decrease of 22, and increase of 9 by transfer from Bureau of Crop Estimates, making a net decrease of 13 places) (<i>same acts</i>)..... 82, 000. 00		
NOTE.—See note under item 15.		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>Salaries, Bureau of Markets and Crop Estimates—Continued.</i>		
(27) Fourteen clerks, at \$1,080 each (increase of 1) (<i>R. S.</i> , p. 87, secs. 520-523; acts Mar. 4, 1913, vol. 37, p. 854, sec. 1; May 31, 1920, vol. 41, p. 723, sec. 1) -----	\$15, 120. 00	
NOTE.—See note under item 21.		
(28) Seven clerks, at \$1,020 each (<i>same acts</i>) -----	7, 140. 00	
(29) One photographer (<i>same acts</i>) -----	1, 400. 00	
(30) One photographer (<i>same acts</i>) -----	1, 200. 00	
(31) One superintendent of telegraph (<i>same acts</i>) -----	2, 000. 00	
(32) One supervising telegrapher (<i>same acts</i>) -----	1, 620. 00	
(33) Five telegraph operators, at \$1,600 each (<i>same acts</i>) -----	8, 000. 00	
(34) Forty-seven telegraph operators, at \$1,400 each (<i>same acts</i>) -	65, 800. 00	
(35) 【One telegraph operator, \$1,320.】		
NOTE.—See note under item 21.		
(36) 【Seven telegraph operators, at \$1,200 each.】		
NOTE.—See note under item 21.		
(37) 【One telegraph operator, \$1,080.】		
NOTE.—See note under item 21.		
(38) Two telephone operators, at \$900 each (<i>same acts</i>) -----	1, 800. 00	
(39) One telephone operator (<i>same acts</i>) -----	840. 00	
(40) One draftsman (<i>same acts</i>) -----	1, 400. 00	
(41) One draftsman (by transfer from lump fund) (<i>same acts</i>) ---	1, 380. 00	
(42) Three draftsmen, at \$1,200 each (<i>same acts</i>) -----	3, 600. 00	
(43) One draftsman (<i>same acts</i>) -----	1, 000. 00	
(44) One draftsman (<i>same acts</i>) -----	900. 00	
(45) One custodian of supplies (by transfer from lump fund) (<i>same acts</i>) -----	1, 200. 00	
(46) 【One map tracer, \$900.】		
NOTE.—It is proposed to omit this place and that of map tracer at \$720 (item 47). The positions have remained vacant for some time because of inability to secure qualified employees at the low salaries provided		
(47) 【One map tracer, \$720.】		
NOTE.—See note under item 46.		
(48) Three machine operators, at \$1,400 each (increase of 1 by transfer from lump fund) (<i>same acts</i>) -----	4, 200. 00	
(49) Four machine operators, at \$1,200 each (<i>same acts</i>) -----	4, 800. 00	
(50) Two machine operators, at \$1,100 each (<i>same acts</i>) -----	2, 200. 00	

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>Salaries, Bureau of Markets and Crop Estimates—Continued.</i>		
(51) Eleven machine operators, at \$1,000 each (<i>R. S., p. 87, secs. 520-523; acts Mar. 4, 1913, vol. 37, p. 854, sec. 1; May 31, 1920, vol. 41, p. 723, sec. 1</i>)	\$11,000.00	
(52) Three machine operators, at \$900 each (increase of 1 by transfer from lump fund) (<i>same acts</i>)	2,700.00	
(53) Three chauffeurs, at \$900 each (<i>same acts</i>)	2,700.00	
(54) One skilled laborer (<i>submitted</i>)	1,200.00	
NOTE.—See note under item 13.		
(55) [Three skilled laborers, at \$900 each.]		
NOTE.—See note under item 56.		
(56) Five laborers, at \$900 each (2 by transfer from lump fund and 3 new places) (<i>R. S., p. 87, secs. 520-523; acts Mar. 4, 1913, vol. 37, p. 854, sec. 1; May 31, 1920, vol. 41, p. 723, sec. 1</i>)	4,500.00	
NOTE.—The three new places recommended in this grade are submitted in lieu of three skilled laborers at the same salary (item 55). This change in designation will permit greater latitude in filling the places should vacancies occur, as the position of laborer may, under civil-service rules, be filled by either a skilled or an unskilled laborer, while the position of skilled laborer can only be filled by a person who has qualified as such. At times there is difficulty in securing skilled laborers at this salary.		
(57) Three laborers, at \$840 each (<i>same acts</i>)	2,520.00	
(58) Ten laborers, at \$720 each (increase of 4 by transfer from lump fund) (<i>same acts</i>)	7,200.00	
(59) Four laborers, at \$660 each (<i>same acts</i>)	2,640.00	
(60) Five laborers, at \$600 each (<i>same acts</i>)	3,000.00	
(61) Two laborers, at \$540 each (<i>same acts</i>)	1,080.00	
(62) Six messengers, at \$900 each (increase of 3, 1 by transfer from Bureau of Crop Estimates and 2 new places) (<i>same acts</i>)	5,400.00	
NOTE.—See note under item 13.		
(63) Two messengers, at \$720 each (<i>same acts</i>)	1,440.00	
(64) Three messenger boys, at \$660 each (by transfer from the Bureau of Crop Estimates) (<i>same acts</i>)	1,980.00	
(65) Twelve messenger boys, at \$600 each (increase of 2, 1 by transfer from lump fund and 1 by transfer from Bureau of Crop Estimates) (<i>same acts</i>)	7,200.00	
(66) Fifteen messenger boys, at \$540 each (<i>same acts</i>)	8,100.00	
(67) Twenty messenger boys, at \$480 each (<i>same acts</i>)	9,600.00	
(68) Two charwomen, at \$540 each (increase of 1 by transfer from Bureau of Crop Estimates) (<i>same acts</i>)	1,080.00	
(69) Six charwomen, at \$480 each (<i>same acts</i>)	2,880.00	

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.		Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>Salaries, Bureau of Markets and Crop Estimates—Continued.</i>			
(70) Two charwomen, at \$360 each (1 by transfer from Bureau of Crop Estimates and 1 new place) (<i>R. S., p. 87, secs. 520-523; acts Mar. 4, 1913, vol. 37, p. 854, sec. 1; May 31, 1920, vol. 41, p. 723, sec. 1</i>)	\$720. 00		
NOTE.—See note under item 13.			
(71) Six charwomen, at \$300 each (<i>same acts</i>)	1, 800. 00		
(72) Nine charwomen, at \$240 each (<i>same acts</i>)	2, 160. 00		
		\$937, 870. 00	\$710, 650. 00
Appropriation for 1916.....	\$56, 400	Estimate for 1917.....	\$134, 980
Appropriation for 1917.....	123, 880	Estimate for 1918.....	198, 420
Appropriation for 1918.....	197, 820	Estimate for 1919.....	387, 850
Appropriation for 1919.....	387, 850	Estimate for 1920.....	739, 290
Appropriation for 1920.....	671, 810	Estimate for 1921.....	802, 270
Appropriation for 1921.....	710, 650	Estimate for 1922.....	937, 870
NOTE.—Apparent increase, \$227,220; actual increase, \$185,020, as follows:			
<i>Promotions.</i>			
1 chief of bureau, from \$5,000 to \$7,500.....	\$2, 500		
1 administrative assistant, from \$1,800 to \$2,400.....	600		
		\$3, 100	
<i>New places.</i>			
1 executive clerk.....	2, 250		
3 executive clerks, at \$2,000 each.....	6, 000		
2 executive clerks, at \$1,980 each.....	3, 960		
9 clerks, class 4.....	16, 200		
16 clerks, class 3.....	25, 600		
27 clerks, class 2.....	37, 800		
1 clerk.....	1, 320		
18 clerks, class 1.....	21, 600		
1 clerk.....	1, 080		
1 skilled laborer.....	1, 200		
3 laborers, at \$900 each.....	2, 700		
2 messengers, at \$900 each.....	1, 800		
1 charwoman.....	360		
		121, 870	
<i>Transfers from statutory roll, Bureau of Crop Estimates.</i>			
1 chief clerk (administrative assistant).....	1, 800		
6 clerks, class 4.....	10, 800		
9 clerks, class 3.....	14, 400		
15 clerks, class 2.....	21, 000		
40 clerks, class 1.....	48, 000		
9 clerks, at \$1,000 each.....	9, 000		
1 messenger.....	900		
3 messenger boys, at \$660 each.....	1, 980		
1 messenger boy.....	600		
1 charwoman.....	540		
1 charwoman.....	360		
		109, 380	
		234, 359	
<i>Places dropped.</i>			
1 chief clerk.....	2, 000		
1 clerk in charge of supplies and accounts.....	2, 250		
2 clerks, at \$2,000 each.....	4, 000		
1 executive assistant.....	1, 980		
1 administrative assistant.....	1, 980		
22 clerks, at \$1,000 each.....	22, 000		
1 telegraph operator.....	1, 320		
7 telegraph operators, at \$1,200 each.....	8, 400		
1 telegraph operator.....	1, 080		
1 map tracer.....	900		
1 map tracer.....	720		
3 skilled laborers, at \$900 each.....	2, 700		
		49, 330	
Actual increase.....		185, 020	

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>Salaries, Bureau of Markets and Crop Estimates—Continued.</i>		
<i>Transfers from lump funds which funds have been correspondingly reduced.</i>		
1 executive clerk..... \$1,980 1 clerk, class 3..... 1,600 3 clerks, at \$1,560 each..... 4,680 5 clerks, class 2..... 7,000 1 clerk..... 1,380 14 clerks, at \$1,100 each..... 15,400 1 draftsman..... 1,380 1 custodian of supplies..... 1,200 1 machine operator..... 1,400 1 machine operator..... 900 2 laborers, at \$900 each..... 1,800 4 laborers, at \$720 each..... 2,880 1 messenger boy..... 600		
	\$42,200	
Apparent increase.....		227,220
<i>General Expenses, Bureau of Markets and Crop Estimates—</i>		
(73) For salaries and the employment of labor in the city of Washington and elsewhere, furniture, supplies, traveling expenses, rent outside of the District of Columbia, and all other expenses necessary in conducting investigations, experiments, and demonstrations, as follows (<i>acts Mar. 4, 1913, vol. 37, p. 854, sec. 1; May 31, 1920, vol. 41, pp. 723-725, sec. 1</i>):		
(74) For acquiring and diffusing among the people of the United States useful information on subjects connected with the marketing and distributing of farm and nonmanufactured food products and the purchasing of farm supplies, independently and in cooperation with other branches of the department, State agencies, purchasing and consuming organizations, and persons engaged in the transportation, marketing, and distributing of farm and food products, \$300,000 <i>¶</i> : <i>Provided</i> , That not less than \$20,000 shall be used for a study of the methods of prevention of losses by deterioration, decay, and freezing of fruits and vegetables in storage and in transit in refrigerator cars, heater cars, and ocean vessels, including demonstrations of such methods <i>¶</i> (<i>same acts</i>).....		
Appropriation for 1916..... \$238,000 Appropriation for 1917..... 285,000 Appropriation for 1918..... 289,400 Appropriation for 1919..... 292,240 Appropriation for 1920..... 317,520 Appropriation for 1921..... 300,000	Estimate for 1917..... \$325,831 Estimate for 1918..... 295,400 Estimate for 1919..... 292,240 Estimate for 1920..... 317,520 Estimate for 1921..... 347,980 Estimate for 1922..... 300,000	\$300,000.00
NOTE:—While there is apparently no change in the amount of this item, there is actually an increase of \$113,560, as 1 clerk at \$1,560, 1 at \$1,400, and 2 at \$1,100 each have been transferred to the statutory roll, and projects now conducted under this item carrying a total of \$108,400 have been transferred to the items for preservation of fruits and vegetables in transit and storage (item 75), market information service (item 78), and foreign marketing (item 84).		
It is proposed to use this increase as follows:		
(a) \$19,230 for investigations of cooperative purchasing and marketing. The steady growth of the cooperative movement and the fact that it probably will receive a further impetus in the near future makes it necessary for the department to be in a position to give expert advice to groups desiring to organize associations, federations, central organizations, etc., or to aid in effecting improvements in the management of existing organizations. At the present time increased attention to cooperative work is strongly demanded in the South in connection with the organization of associations for the marketing of cotton and sweet potatoes; in the North for the organization of associations concerned with the marketing of dairy and poultry products; and in the Pacific Northwest in connection with the organization of grain and live-stock associations.		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Bureau of Markets and Crop Estimates—Continued.</i>		
<p>(b) \$13,200 for fruit and vegetable marketing investigations and demonstrations. This amount is desired (1) for demonstrating grades for fruits and vegetables. Requests for such work have come during the past year from Arkansas, Montana, Utah, Indiana, Pennsylvania, and New York, which could not be complied with. Demonstrations of this kind should constitute a very important phase of the work of securing the actual introduction of uniform standards for fruits and vegetables. (2) The question of the establishment of a shipping-point inspection service should be investigated. Various States have this problem under consideration and desire Federal assistance along this line. It is very important that any State shipping-point inspection service that may be established shall be based on correct principles, because the operation of such services may influence very greatly the results obtained in connection with the department's present inspection service at important central markets. (3) A study to determine the extent to which the marketing of perishables is being changed from a consignment to a cash basis should be undertaken, as well as comparative studies of the relative merits of auction and private sales.</p> <p>(c) \$10,000 for studies of miscellaneous problems in marketing. Questions relating to the marketing of farm products by motor trucks need investigating. The Chief of the Bureau of Public Roads has requested the Bureau of Markets to undertake work of this kind. Under war emergency funds the Bureau of Markets conducted incidental investigations relating to motor-truck marketing and performed some demonstrational and service work in the same connection. A certain amount of data is therefore on hand which should be brought up to date, supplemented, and made available.</p> <p>(d) \$14,700 for cotton handling and marketing work. The demonstrational phases of this work are conducted in cooperation with the extension divisions of the various States. Its object is to educate producers regarding the value of classing cotton before sale, the use of market quotations, growing of better varieties of cotton on a community basis, the depressing effect of inferior staple upon prices, and other matters. It has been attended with such encouraging results that the department is constantly besieged for an extension of its cooperative arrangements. The increase requested would permit extension of the work to Alabama, Georgia, California, and Arizona, and the enlargement of the activities already under way in Arkansas, North Carolina, and Oklahoma.</p> <p>(e) \$8,200 for cottonseed marketing. The value of the cottonseed industry in this country is estimated at amounts ranging from \$200,000,000 to \$300,000,000. Attention has been given to this project by the Bureau of Markets for several years, but reduced appropriations have made it necessary to discontinue the work during the current fiscal year. In the course of the investigations already conducted much data were collected which should be compiled and made available. The advisability of promulgating standards for cotton seed has been widely discussed, and on at least one occasion persons interested in the industry suggested tentative standards. The small sum requested would enable the department to reestablish the work on its former basis and make available the data already secured and continue its investigations.</p> <p>(f) \$40,210 for marketing live stock, meats, and wool. This increase is desired largely for extending the wool-marketing work. Tentative standards for wool have been established, but an immense amount of work remains to be done in demonstrating the use of these standards, determining their applicability to the wool clip, and investigating further the conditions which surround the marketing of this important commodity. The investigations already conducted have indicated conclusively the haphazard, inefficient, and wasteful methods followed by producers and other agencies engaged in marketing wool, and it is felt that very important improvements may be effected as the result of the proper development of this work. Further investigations should be conducted to ascertain the average shrinkage and losses of live stock in transit under different conditions. Studies should be made to determine the most efficient and economical methods of marketing live stock. The costs and yields of packing-house products and by-products and their efficient utilization should be studied with a view to determine their relation to live and dressed market prices.</p> <p>(g) \$3,980 for marketing dairy products. It is important that investigations be made relative to the standardization of butter. In this respect the United States lags behind certain other countries, as, for example, Denmark, which recently exported large quantities of scientifically packed and standardized butter to this country.</p> <p>(h) \$4,040 for marketing hay, feeds, and seeds. This small increase is desired for the employment of an investigator to assist in hay standardization work. Work of this kind is now under way. Elsewhere in these estimates a recommendation is made for the establishment of a hay inspection service (item 80). Careful investigations will be neces-</p>		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.					Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Bureau of Markets and Crop Estimates—Continued.</i>						
<p>sary, however, to determine the applicability of the standards to the crop and to suggest improvements therein.</p> <p>The proviso relating to investigations of the preservation of fruits and vegetables in transit and storage is recommended omitted. The importance of this work justifies its establishment as a major activity and a separate item therefor is submitted. (See item 75.)</p>						
Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Ex-pended, 1920.		
Salaries:		Number.	Number.	Number.		
Live-stock commissioner (tem-porary).....per annum..	\$4,500.00			1		
Live-stock commissioner (tem-porary).....do.....	4,250.00		1			
Agricultural trade commis-sioner.....do.....	4,000.00		1			
Specialist.....do.....	4,500.00	2	1	1		
Specialist.....do.....	4,260.00		1			
Specialist.....do.....	4,000.00	2		1		
Specialist (part time).....do.....	3,750.00			1		
Specialist (part time).....do.....	3,720.00			1		
Specialist.....do.....	3,600.00	1	1	1		
Specialist.....do.....	3,500.00	2	2			
Specialist (part time).....do.....	3,300.00		1	1		
Specialist.....do.....	3,240.00	1	1	5		
Specialist.....do.....	3,120.00	1	1			
Specialist.....do.....	3,000.00	3	4	7		
Specialist.....do.....	2,760.00	1	2	1		
Specialist (part time).....do.....	2,640.00			1		
Specialist (part time).....do.....	2,400.00	3	2	2		
Specialist (temporary).....do.....	2,040.00			2		
Specialist (temporary).....do.....	1,800.00			1		
Specialist (part time).....do.....	1,000.00	1				
Supervisor (temporary).....do.....	3,000.00	1		1		
Pomologist.....do.....	4,000.00		1	1		
Investigator.....do.....	3,600.00			1		
Investigator.....do.....	3,250.00			1		
Investigator.....do.....	3,240.00	1				
Investigator.....do.....	3,000.00	5	6	1		
Investigator (part time).....do.....	2,880.00		1	3		
Investigator.....do.....	2,760.00	1		1		
Investigator.....do.....	2,740.00	2				
Investigator.....do.....	2,580.00	1	1			
Investigator (part time).....do.....	2,520.00			2		
Investigator.....do.....	2,500.00	1	3	2		
Investigator.....do.....	2,400.00	4	3	6		
Investigator.....do.....	2,280.00	3	3	3		
Investigator.....do.....	2,220.00			1		
Investigator.....do.....	2,100.00			1		
Investigator.....do.....	2,040.00		1	4		
Investigator (temporary).....do.....	2,000.00	1		2		
Investigator.....do.....	1,860.00		1			
Investigator.....do.....	1,800.00	1	1	3		
Investigator (part time).....do.....	1,680.00			1		
Technologist.....do.....	3,000.00		2	1		
Pathologist (part time).....do.....	2,520.00			1		
Pathologist (part time).....do.....	2,460.00			1		
Pathologist (part time).....do.....	2,400.00			1		
Assistant (temporary).....do.....	3,000.00	18	2	4		
Assistant.....do.....	2,880.00		1			
Assistant.....do.....	2,820.00	1	1			
Assistant.....do.....	2,740.00			1		
Assistant.....do.....	2,700.00	1				
Assistant (part time).....do.....	2,640.00			1		
Assistant (part time).....do.....	2,580.00	1		2		
Assistant.....do.....	2,520.00			2		
Assistant.....do.....	2,400.00	5	2	8		
Assistant (temporary).....do.....	2,280.00	1	2	2		
Assistant.....do.....	2,220.00	1		1		
Assistant.....do.....	2,160.00	1	2	1		
Assistant (temporary).....do.....	2,100.00			1		
Assistant.....do.....	2,040.00	3	4	3		
Assistant (temporary).....do.....	2,000.00			1		
Assistant (part time).....do.....	1,980.00		1	1		
Assistant.....do.....	1,920.00			2		
Assistant (part time).....do.....	1,860.00			2		
Assistant.....do.....	1,800.00	2	6	14		
Assistant (temporary).....do.....	1,680.00		1	3		
Assistant.....do.....	1,620.00	1	4	7		
Assistant (part time).....do.....	1,600.00			1		
Assistant.....do.....	1,500.00			4		
Assistant.....do.....	1,440.00	1	1	3		
Assistant (temporary).....do.....	1,400.00			1		
Assistant.....do.....	1,380.00	1	1			
Assistant.....do.....	1,200.00	1	1	2		
Agent (temporary).....do.....	2,400.00	1	1	4		
Agent.....do.....	1,800.00	5	1	1		
Agent.....do.....	1,200.00			1		
Agent.....do.....	1,000.00	1		1		
Clerk (temporary).....do.....	1,800.00			1		
Clerk (temporary).....do.....	1,600.00			1		
Clerk.....do.....	1,560.00		1			
Clerk.....do.....	1,400.00	1	2			
Clerk (temporary).....do.....	1,380.00			1		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.					Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Bureau of Markets and Crop Estimates—Continued.</i>						
	Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Ex-pended, 1920.	
	Salaries—Continued.		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>	
	Clerk.....per annum.....	\$1,200.00	4		9	
	Clerk.....do.....	1,100.00	1	3	10	
	Clerk (temporary).....do.....	1,000.00			10	
	Draftsman.....do.....	1,800.00			1	
	Machine operator.....do.....	1,100.00			1	
	Machine operator.....do.....	1,000.00			1	
	Agents, collaborators, machine operators, telephone operators, and messengers, \$900 to \$1.....do.....		27	13	44	
	Wages:					
	Laborer (temporary).....	1,200.00			1	
	Laborers and charwomen, \$900 to \$240.....				3	
			116	91	221	
	Salaries.....		\$193,015.00	\$193,175.00	\$169,235.24	
	Wages.....				1,210.00	
	OTHER OBJECTS OF EXPENDITURE.					
	Stationery.....		9,220.00	9,280.00	9,757.41	
	Traveling expenses.....		62,890.00	63,225.00	53,739.43	
	Equipment and material.....		15,375.00	15,000.00	30,678.13	
	Telephone and telegraph service.....		4,200.00	4,150.00	6,230.47	
	Miscellaneous items.....		15,300.00	15,170.00	23,626.45	
	Total.....		300,000.00	300,000.00	294,477.13	
(75)	For investigating and demonstrating, independently and in co-operation with other branches of the Government, State agencies, purchasing and consuming organizations, and persons engaged in the production, transportation, marketing, and distribution of farm and food products, methods of and facilities for handling, packing, precooling, loading, refrigerating in transit, transporting, and storing perishable farm products so as to reduce marketing losses through damage, deterioration, and decay (submitted).....					\$75,000.00
	NOTE.—While this appears as a new item, it merely provides for the continuation on a more comprehensive scale of the fruit and vegetable preservation work formerly conducted under the appropriation for marketing and distributing farm products. (See first paragraph of note under item 74.) The amount recommended (\$75,000) is an actual increase over available funds of only \$35,600, as \$39,400 is transferred from the item for marketing and distributing farm products.					
	Enormous sums are lost annually on account of the waste, decay, and deterioration of fruits and vegetables in transit and storage. It is estimated that during the season of 1919 approximately \$25,000,000 was lost on account of the improper storage of sweet potatoes alone. Preventable losses from bad loading frequently amount to 20 per cent of the shipment of such commodities as grapes and apples. Disastrous losses are caused also by the freezing of fruits and vegetables in transit. Last winter shippers of apples in Oregon, Washington, and Idaho filed claims against railroads amounting to over \$3,000,000 to cover losses from freezing. Particularly heavy losses are experienced in the shipment of fruit in steamships because of faulty methods of handling and lack of suitable facilities for proper refrigeration and ventilation of shipments. The waste in export shipments due to decay and deterioration in transit annually approximates 25 per cent of the apples sent to European markets. These investigations have pointed out the causes of these losses and demonstrated improved methods of handling these products, which have been of far-reaching importance to producers, shippers, and consumers.					
	Growers, shippers, carriers, and others interested in the transportation and storage of fruits and vegetables have urged the department to expand this work. Such organizations as the American Fruit and Vegetable Shippers' Association, the California Fruit Growers' Exchange, the Florida Citrus Exchange, the Northwestern Fruit Exchange, and the International Apple Shippers' Association have expressed high appreciation of the work that the department has already done.					

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.					Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Bureau of Markets and Crop Estimates—Continued.</i>						
Employees.	Rate.	Estimated, 1922.	Appropriated, 1921. ¹	Expended, 1920. ¹		
Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>		
Pomologist.....per annum..	\$4,000.00	1	1	1		
Specialist.....do.....	3,500.00	1	1	1		
Specialist.....do.....	3,000.00	1	1	1		
Specialist.....do.....	2,760.00	1	1	1		
Technologist.....do.....	3,000.00	2	2	2		
Investigator.....do.....	2,880.00	1	1	1		
Investigator.....do.....	2,760.00	1	1	1		
Investigators.....do.....	2,500.00	2	2	2		
Investigator.....do.....	1,860.00	1	1	1		
Assistants.....do.....	2,000.00	2	2	2		
Assistants.....do.....	1,800.00	5	5	5		
Assistants.....do.....	1,620.00	2	2	2		
Clerk.....do.....	1,440.00	1	1	1		
Clerk.....do.....	1,200.00	2	2	2		
		23				
Salaries.....		\$50,940.00				
OTHER OBJECTS OF EXPENDITURE.						
Traveling expenses.....		15,500.00				
Equipment and material.....		2,845.00				
Telephone and telegraph service.....		1,450.00				
Miscellaneous items.....		4,265.00				
Total.....		75,000.00				

¹ During 1920 and 1921 this work was carried under the appropriation for "Marketing and distributing farm products."

- (76) [To enable the Secretary of Agriculture to gather from stockmen, live-stock associations, State live-stock and agricultural boards, common carriers, stockyards, commission firms, live-stock exchanges, slaughtering and meat-packing companies, and others information relative to the number of different classes and grades of marketable live stock, especially cattle, hogs, and sheep in the principal live-stock feeding districts and growing sections; prices, receipts, and shipments of the different classes and grades of cattle, hogs, and sheep at live-stock market centers; prices of meats, fish, and meat and fish food products and the amounts of such products in storage; to compile and publish such information at such frequent intervals as most effectively to guide producers, consumers, and distributors in the sale and purchase of live stock, meats, fish, and other animal products; and to gather and publish any related information pertaining to marketing and distribution of live stock, meats, fish, and animal by-products, the sum of \$89,320.]

NOTE.—See note under item 78.

- (77) [For collecting and distributing, by telegraph, mail, and otherwise, timely information on the market supply, demand, commercial movement, location, disposition, quality, and market prices of fruits, vegetables, peanuts and their products, dairy and poultry products, grain, hay, feeds, and seeds, \$314,600.]

NOTE.—See note under item 78.

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
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General Expenses, Bureau of Markets and Crop Estimates—Continued.

- (78) For collecting, publishing, and distributing, by telegraph, mail, or otherwise, timely information on the market supply and demand, commercial movement, location, disposition, quality, condition, and market prices of live stock, meats, fish, and animal products, dairy and poultry products, fruits and vegetables, peanuts and their products, grain, hay, feeds, and seeds, and other agricultural products, independently and in cooperation with other branches of the Government, State agencies, purchasing and consuming organizations, and persons engaged in the production, transportation, marketing and distribution of farm and food products (submitted) ---- \$750,000.00

NOTE.—This item merely represents a combination of the two existing market news service items for which a total appropriation of \$403,920 is now provided. While the amount recommended (\$750,000) is apparently an increase over those two items of \$346,080, the actual increase is \$324,840, as places aggregating \$13,760 are transferred to the statutory roll and \$35,000 of the funds now provided under the item for marketing and distributing farm products is transferred to this item to provide for the continuation hereunder of the projects "Cold storage reports," "Marketing statistics," and "Market information service." (See first paragraph of note under item 74.)

The increase recommended is desired principally to enable the department to reestablish live stock and fruit and vegetable market reporting offices at Fort Worth, Tex., with leased wire connection, and live-stock reporting offices at Sioux City and St. Joseph. It is thought that this increase will also make it possible to open several additional temporary reporting offices in fruit and vegetable sections; to establish a local market reporting office on live stock and meats at San Francisco; and to perfect the dairy and poultry market reports at offices already established and to extend these reports to include prices on eggs and poultry.

The commercial telegraph companies have notified the department that rates for leased wire facilities will be doubled when, or before, peace is declared. It is estimated that expenses for telegraph and telephone, under the increased appropriation requested and when the advance in telegraph rates goes into effect, will amount to \$172,431.

The news service on all commodities at present is conducted with a skeleton form of organization entirely inadequate to meet the demands upon it. A portion of the increase will be used to strengthen and perfect the existing organization which is necessary for the betterment of the service.

It is believed that the consolidation into one general item of the various projects embraced in the department's market information service will effect a more logical arrangement of the work and promote efficiency in operation.

Employees.	Rate	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.
Salaries:		Number.	Number.	Number.
Specialist..... per annum..	\$4,500.00	1	1	1
Specialist.....do.....	4,260.00	1	1	1
Specialist.....do.....	3,600.00	1	1	1
Specialist.....do.....	3,300.00	1	1	1
Specialist.....do.....	3,240.00	1	1	1
Specialist.....do.....	3,000.00	1	1	1
Specialist.....do.....	2,740.00	1	1	1
Investigator.....do.....	3,000.00	2	1	1
Investigator.....do.....	2,880.00	1	1	1
Investigator.....do.....	2,520.00	1	1	2
Investigator.....do.....	2,400.00	1	1	4
Investigator.....do.....	2,280.00	1	1	1
Investigator.....do.....	2,100.00	1	1	1
Investigator.....do.....	2,040.00	7	3	5
Investigator.....do.....	2,000.00	1	1	1
Investigator.....do.....	1,980.00	1	1	1
Investigator.....do.....	1,900.00	1	1	1
Investigator.....do.....	1,800.00	3	3	7
Assistant.....do.....	3,000.00	5	3	2
Assistant.....do.....	2,880.00	7	1	1
Assistant.....do.....	2,820.00	1	1	1
Assistant.....do.....	2,740.00	1	1	1
Assistant.....do.....	2,640.00	1	1	1
Assistant.....do.....	2,580.00	1	1	2
Assistant.....do.....	2,520.00	4	4	1
Assistant.....do.....	2,460.00	1	1	1
Assistant.....do.....	2,400.00	7	5	5
Assistant.....do.....	2,340.00	3	3	1

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
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General Expenses, Bureau of Markets and Crop Estimates—Continued.

Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.
		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>
Salaries—Continued.				
Assistant.....per annum..	\$2,300.00			1
Assistant.....do.....	2,280.00	12	4	3
Assistant.....do.....	2,250.00	1	1	
Assistant.....do.....	2,220.00	9	3	3
Assistant.....do.....	2,160.00	6	5	4
Assistant.....do.....	2,120.00			1
Assistant.....do.....	2,100.00	1	1	7
Assistant.....do.....	2,040.00	6	4	8
Assistant.....do.....	2,000.00			1
Assistant.....do.....	1,980.00	5	4	6
Assistant.....do.....	1,920.00	2	2	7
Assistant.....do.....	1,860.00	2	3	2
Assistant.....do.....	1,800.00	15	9	22
Assistant.....do.....	1,700.00			1
Assistant.....do.....	1,680.00	1	1	11
Assistant.....do.....	1,620.00	3	2	15
Assistant.....do.....	1,500.00	1		4
Assistant.....do.....	1,440.00			3
Assistant.....do.....	1,400.00	1		1
Assistant.....do.....	1,200.00			2
Clerk.....do.....	2,000.00			2
Clerk.....do.....	1,680.00			1
Clerk.....do.....	1,600.00			1
Clerk.....do.....	1,500.00			1
Clerk.....do.....	1,400.00	4	1	
Clerk.....do.....	1,380.00		1	1
Clerk.....do.....	1,200.00	9		26
Clerk.....do.....	1,100.00	9	4	25
Clerk.....do.....	1,000.00			37
Machine operators.....do.....	1,000.00	1		10
Telegraph operators.....do.....	1,600.00	7		
Telegraph operators.....do.....	1,400.00		1	2
Agents, machine operators, clerks, and messenger boys, \$900 to \$360.....do.....		9	2	32
Wages:				
Laborers and charwomen, \$900 to \$240.....do.....			1	5
		167	83	291
Salaries.....		\$315,730.00	\$173,210.00	\$213,345.21
Wages.....			900.00	1,917.50
OTHER OBJECTS OF EXPENDITURE.				
Stationery.....		91,018.00	28,366.00	30,488.34
Traveling expenses.....		88,977.00	29,280.00	34,988.68
Equipment and material.....		33,401.00	22,830.00	16,548.85
Telephone and telegraph service.....		172,431.00	118,700.00	121,957.51
Miscellaneous items.....		48,443.00	30,634.00	62,248.99
Total.....		750,000.00	403,920.00	481,495.08

- (79) To make investigation relating to the transportation, storage, preparation, marketing, and distribution of agricultural food products, including the extent, manner, and methods of any manipulation of the markets or control of the visible supply of such food products, or any of them, by any individuals, groups, associations, combinations, or corporations **[\$45,620]** (*acts Mar. 4, 1913, vol. 37, p. 854, sec. 1; May 31, 1920, vol. 41, p. 723, sec. 1*)..... \$40,920.00

Appropriation for 1918.....	\$50,000	Estimate for 1919.....	\$48,800
Appropriation for 1919.....	48,800	Estimate for 1920.....	48,800
Appropriation for 1920.....	48,800	Estimate for 1921.....	45,620
Appropriation for 1921.....	45,620	Estimate for 1922.....	40,920

NOTE.—There is an apparent decrease in this item of \$4,700, due to the transfer to the statutory roll of one clerk of class 2, and three clerks, at \$1,100 each.

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.					Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Bureau of Markets and Crop Estimates—Continued.</i>						
Employees.	Rate.	Esti- mated, 1922.	Appro- priated, 1921.	Ex- pended, 1920.		
Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>		
Specialist.....per annum	\$4,500.00	1	1	1		
Specialist.....do.	3,600.00			1		
Specialist.....do.	3,000.00	2	2	2		
Economist (temporary).....do.	3,600.00		1	1		
Economist.....do.	3,500.00	1				
Investigator (temporary).....do.	3,000.00			2		
Investigator.....do.	2,400.00	2	2			
Investigator (part time).....do.	2,100.00			1		
Accountant.....do.	3,000.00	1				
Accountant.....do.	1,800.00	1				
Assistant.....do.	2,760.00			1		
Assistant (part time).....do.	2,580.00			1		
Assistant.....do.	2,500.00	1				
Assistant (part time).....do.	2,400.00			2		
Assistant.....do.	2,340.00		1			
Assistant.....do.	2,280.00	1	1	2		
Assistant (part time).....do.	2,220.00			1		
Assistant (part time).....do.	2,200.00			1		
Assistant (temporary).....do.	2,100.00			1		
Assistant.....do.	2,040.00		1	3		
Assistant (temporary).....do.	2,000.00			1		
Assistant (part time).....do.	1,980.00			1		
Assistant.....do.	1,800.00	1	3	2		
Assistant.....do.	1,620.00		1	2		
Clerk (temporary), \$1,800 to \$1,000.....do.			5	15		
Charwoman.....do.	240.00			1		
Wages:						
Fireman (temporary).....do.	1,080.00			1		
		11	18	43		
Salaries.....		\$30,180.00	\$33,770.00	\$30,936.04		
Wages.....				1,014.00		
OTHER OBJECTS OF EXPENDITURE:						
Stationery.....		2,150.00	2,150.00	2,011.46		
Traveling expenses.....		8,220.00	8,975.00	9,391.91		
Equipment and material.....		200.00	200.00	354.52		
Miscellaneous items.....		170.00	525.00	710.42		
Total.....		40,920.00	45,620.00	44,418.35		

- (80) For enabling the Secretary of Agriculture to investigate and certify to shippers and other interested parties the quality and condition of fruits, vegetables, poultry, butter, hay, and other perishable farm products, when received [in interstate commerce] at such important central markets as the Secretary of Agriculture may from time to time designate, or at points which may be conveniently reached therefrom, under such rules and regulations as he may prescribe, including payment of such fees as will be reasonable and as nearly as may be to cover the cost for the service rendered: *Provided*, That certificates issued by the authorized agents of the department shall be received in all courts of the United States as prima facie evidence of the truth of the statements therein contained [\$141,700] (acts Mar. 4, 1913, vol. 37, p. 854, sec. 1; May 31, 1920, vol. 41, p. 723, sec. 1).....\$225,000.00

Appropriation for 1919.....	\$113,000	Estimate for 1920.....	\$201,960
Appropriation for 1920.....	150,000	Estimate for 1921.....	191,700
Appropriation for 1921.....	141,700	Estimate for 1922.....	225,000

NOTE.—There is an apparent increase in this item of \$83,300 but, taking into consideration the transfer of 1 clerk at \$1,560 to the statutory roll, the actual increase is \$84,860, which it is proposed to use as follows:

(a) \$39,385 for fruit and vegetable inspections. The present allotment to this project is entirely inadequate for the proper maintenance of this service in the markets where it is already established, and since the number of applications is increasing each month, it is urgent that a larger sum be provided next year. During 1919, 14,493 inspections were made, and the number during 1920 was 25,488. This increase of approximately 75 per cent, however, should be considered in conjunction with the fact that 3,151 applications were declined. During the past fiscal year the offices at Jacksonville, Denver, Des Moines, and Portland, Oreg., were closed entirely, and the offices at Columbus and Houston were closed

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<p><i>General Expenses, Bureau of Markets and Crop Estimates—Continued.</i></p> <p>for 3 months and Fort Worth for 6 months in order that the inspectors located at those points could be utilized in the larger markets where the demand was greater, but even after these steps had been taken it was impossible to comply with the requests for inspection. At Pittsburgh, Philadelphia, Baltimore, New York, Boston, Chicago, and St. Louis, 2,411 inspections had to be declined in the three months, May, June, and July, 1920. If the increase requested is allowed, it will prevent the closing of the Columbus, Houston, and Fort Worth offices for several months, as was necessary this year, permit the reopening of the office at Denver, and make possible the establishment of offices at Toledo and Louisville; and also to put the existing forces on an efficient operating basis. During the past fiscal year \$60,375 was collected in fees and deposited as miscellaneous receipts in the Treasury. Beginning with July 1 of the present year the inspection charge has been increased from \$2.50 to \$4 for a half car, or not to exceed a car of maximum size, and from \$1.50 to \$2.50 for less than half a car. Fees are also being charged at the present time for copies of certificates furnished to interested parties, and it is estimated that at least \$110,000 in fees will be collected during the fiscal year covered by this estimate. This is more than double the entire increase requested for the fruit and vegetable inspection work and would, in effect, reduce the amount to be expended on that work to about \$64,000.</p> <p>(b) \$3,675 for butter and cheese inspections. This additional amount will enable the department to place a butter inspector in San Francisco, where there is considerable demand for this service, and to meet other necessary expenses incurred in connection with the butter and cheese work but which can not be met with the small allotment which it is possible to assign to this project. The total amount of fees collected incident to the butter inspection service during the past fiscal year was \$3,495.</p> <p>(c) \$41,800 for hay inspections. The department has for some time been conducting investigations regarding hay standardization, and it is believed that the hay standards will be ready for promulgation within a short time. The establishment of these standards for use in conjunction with a hay inspection service should accomplish much good. To-day the marketing of hay is a very hazardous undertaking on account of the possibility of losses due to sharp practices, misunderstandings, variations in grades in different markets, differences in the manner in which grading rules are interpreted, etc. It may fairly be stated that nine-tenths of the losses sustained in the hay business are due to a lack of standard grades and a uniform, impartial inspection service. When the estimates were under consideration two years ago, the House Committee on Agriculture, recognizing the need for a hay inspection service, included the word "hay" among the list of commodities to be covered under the inspection service. No funds were provided for the work, however, which has made it impossible to take it up. The present estimates contemplate the installation of this service on a somewhat restricted basis. Under present plans hay inspectors will be stationed at the largest hay markets, including such cities as Chicago, Kansas City, Cincinnati, New York, Atlanta, Pittsburgh, Minneapolis, and St. Louis. These men must be trained in the inspection of hay, and it will be necessary for them to travel to points in territory tributary to their field stations to inspect hay when requested and also to conduct hay grading demonstrations.</p> <p>It is proposed to amend the language of the paragraph by omitting the words "in interstate commerce" and adding the words "or at points which may be conveniently reached therefrom."</p> <p>The words "in interstate commerce" are omitted for the following reasons:</p> <p>(1) The food products inspection service is permissive and in no way regulatory or mandatory. On this account it in no way interferes with the rights of the citizens of any State. Inspections are made only upon application by interested parties, who gladly pay for the service in order to secure a disinterested statement of the true quality and condition of the product in dispute. No one is compelled to request inspections. Those who have no need for such a service or who do not seek it are not required to accept it.</p> <p>(2) The fundamental purposes of the inspection service are to facilitate the distribution and marketing of farm produce and to prevent deterioration and waste. This is accomplished by facilitating the settlement of disputes as to the quality and condition of the produce and hastening the release of cars used in transporting it. When the service is restricted to interstate shipments, these purposes can be accomplished only in a partial way.</p> <p>(3) When the service is once established in a market, practically no additional expense is necessary to make inspections of intrastate shipments. The present restriction decreases the fees received and proportionately increases the cost per car inspected.</p> <p>(4) This service was intended for the protection of all producers who ship their products to distant markets and desire to have the benefit of a</p>		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.					Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Bureau of Markets and Crop Estimates—Continued.</i>						
<p>reliable, disinterested report on their condition upon arrival at market. By restricting inspections to interstate shipments many producers are denied a highly useful service, for which they are willing to pay. The reason for such discrimination is not obvious when no such limitation is applied to most of the other activities of this department, through which valuable services are rendered to producers and others.</p> <p>The insertion of the words "or at points which may be conveniently reached therefrom" is desired in the interest of efficiency and convenience. Many inspections can be made at small towns at short distances from large central markets. A service of this character would be a great accommodation to shippers, although in most cases it might not be desirable formally to designate such points as important central markets at which inspections could be made.</p>						
Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.		
Salaries:		Number.	Number.	Number.		
Specialist.....per annum.	\$3,240.00	1	1			
Specialist.....do.	3,000.00	1	1			
Specialist.....do.	2,760.00			1		
Investigator.....do.	2,100.00			1		
Investigator (temporary).....do.	2,040.00			1		
Investigator.....do.	2,000.00	1	1	5		
Investigator (temporary).....do.	1,920.00			1		
Investigator.....do.	1,900.00			1		
Investigator.....do.	1,800.00			2		
Investigator.....do.	1,680.00			1		
Investigator (temporary).....do.	1,500.00			1		
Pathologist (part time).....do.	2,520.00			1		
Pathologist (part time).....do.	2,460.00			1		
Pathologist.....do.	2,400.00	2	2	1		
Pathologist (part time).....do.	2,200.00			1		
Assistant.....do.	2,400.00	4				
Assistant.....do.	2,220.00	1	1	1		
Assistant.....do.	2,040.00			1		
Assistant.....do.	2,000.00	1	1			
Assistant.....do.	1,980.00			1		
Assistant.....do.	1,880.00			1		
Assistant.....do.	1,800.00	2	2	7		
Assistant.....do.	1,620.00			2		
Assistant (temporary).....do.	1,500.00			2		
Inspector.....do.	3,500.00	2				
Inspector.....do.	3,240.00	1				
Inspector.....do.	3,000.00	4	3	1		
Inspector.....do.	2,880.00	2				
Inspector.....do.	2,760.00			1		
Inspector.....do.	2,500.00	2		1		
Inspector.....do.	2,400.00	2	2	1		
Inspector.....do.	2,220.00	2	2			
Inspector.....do.	2,200.00	1	1	1		
Inspector.....do.	2,160.00	4	4	3		
Inspector.....do.	2,100.00	5	5	2		
Inspector.....do.	2,040.00	7	7	3		
Inspector.....do.	2,000.00	11	6	2		
Inspector.....do.	1,980.00	6	6	8		
Inspector.....do.	1,920.00	2	2	2		
Inspector.....do.	1,860.00	1	1	2		
Inspector.....do.	1,800.00	3	3	10		
Inspector.....do.	1,680.00			2		
Inspector.....do.	1,620.00			1		
Inspector.....do.	1,600.00	1	1	1		
Clerk.....do.	2,000.00			1		
Clerk.....do.	1,560.00		1			
Clerk (temporary).....do.	1,400.00			1		
Clerk (temporary).....do.	1,200.00	1		1		
Clerk (temporary).....do.	1,100.00			5		
Clerk.....do.	1,000.00			3		
Inspector, clerk, and messenger boy, \$600 to \$24.....do.		1	1	2		
Wages:						
Laborer.....do.	48.00			1		
		71	54	88		
Salaries.....		\$147,100.00	\$105,420.00	\$104,073.36		
Wages.....				44.00		
OTHER OBJECTS OF EXPENDITURE.						
Stationery.....		2,625.00	1,300.00	1,349.36		
Traveling expenses.....		41,175.00	19,000.00	20,894.51		
Equipment and material.....		8,850.00	2,500.00	3,030.67		
Telephone and telegraph service.....		4,075.00	3,000.00	4,157.54		
Miscellaneous items.....		*21,175.00	10,480.00	16,063.09		
Total.....		225,000.00	141,700.00	149,612.53		

* Includes \$16,600 for rent outside the District of Columbia.

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.		
<i>General Expenses, Bureau of Markets and Crop Estimates—Continued.</i>				
(81) For investigating, demonstrating, and promoting the use of standards for the different grades, qualities, and conditions of cotton, and for investigating the ginning, grading, stapling, baling, marking, compressing, and tare of cotton, [\$40,000] \$38,400: <i>Provided</i> , That of the sum thus appropriated \$25,860 may be used for testing the waste, tensile strength, and bleaching qualities of the different grades and classes of cotton in order to determine their spinning value and for demonstrating the results of such tests (<i>acts Mar. 4, 1913, vol. 37, p. 854, sec. 1; May 31, 1920, vol. 41, p. 723, sec. 1</i>	\$38, 400. 00			
Appropriation for 1912.....	\$32, 350	Estimate for 1913.....	\$26, 000	
Appropriation for 1913.....	26, 000	Estimate for 1914.....	39, 120	
Appropriation for 1914.....	46, 120	Estimate for 1915.....	46, 120	
Appropriation for 1915.....	70, 000	Estimate for 1916.....	88, 900	
Appropriation for 1916.....	55, 480	Estimate for 1917.....	54, 100	
Appropriation for 1917.....	48, 000	Estimate for 1918.....	53, 000	
Appropriation for 1918.....	48, 000	Estimate for 1919.....	45, 920	
Appropriation for 1919.....	45, 920	Estimate for 1920.....	45, 920	
Appropriation for 1920.....	45, 920	Estimate for 1921.....	43, 920	
Appropriation for 1921.....	40, 000	Estimate for 1922.....	38, 400	
NOTE.—The apparent decrease in this item of \$1,600 is due to the transfer of 1 clerk of class 3 to the statutory roll.				
Employees.	Rate.	Esti- mated, 1922.	Appro- priated, 1921.	Ex- pended, 1920.
Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>
Specialist.....per annum.....	\$4,500.00	1	1	
Specialist (part time).....do.....	3,600.00			4
Specialist.....do.....	3,240.00			1
Specialist (temporary).....do.....	2,760.00			1
Specialist.....do.....	2,400.00	1	1	
Investigator.....do.....	2,520.00	1	1	
Assistant.....do.....	2,700.00	1	1	1
Assistant (part time).....do.....	2,400.00			1
Assistant.....do.....	2,240.00	1	1	
Assistant.....do.....	2,200.00	1	1	2
Assistant (part time).....do.....	2,100.00	1	1	1
Assistant.....do.....	2,000.00			2
Assistant (temporary).....do.....	1,980.00			1
Assistant.....do.....	1,800.00	1	1	3
Assistant (part time).....do.....	1,440.00			1
Agent (temporary).....do.....	1,200.00	2	2	1
Clerk.....do.....	1,600.00		1	
Clerk (part time).....do.....	1,400.00			2
Clerk (part time).....do.....	1,200.00			1
Clerk.....do.....	1,000.00			1
Custodian (part time).....do.....	1,100.00			2
Custodian (part time).....do.....	1,080.00			2
Machine operator (temporary).....do.....	900.00			1
Agent.....per diem.....	8.00			1
		10	11	29
Salaries.....		\$21,960.00	\$23,560.00	\$15,377.16
OTHER OBJECTS OF EXPENDITURE.				
Stationery.....		300.00	150.00	10.80
Traveling expenses.....		3,120.00	3,000.00	2,388.35
Equipment and material.....		11,720.00	11,770.00	18,379.00
Miscellaneous items.....		1,300.00	1,520.00	7,474.50
Total.....		38,400.00	40,000.00	43,629.81

¹ Includes cotton for standards tests, gin-cut and compressed cotton.

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.																																																																																																																																																																												
<i>General Expenses, Bureau of Markets and Crop Estimates—Continued.</i>																																																																																																																																																																														
(82) To enable the Secretary of Agriculture to cooperate with the several States in the employment of agents to acquire and diffuse useful information connected with the distribution and marketing of farm products through investigational, demonstrational, or extension methods (<i>acts Mar. 4, 1913, vol. 37, p. 854, sec. 1; May 31, 1920, vol. 41, p. 723, sec. 1</i>).....		\$70,000.00																																																																																																																																																																												
Appropriation for 1917..... \$35,000	Estimate for 1918..... \$51,600																																																																																																																																																																													
Appropriation for 1918..... 43,000	Estimate for 1919..... 61,500																																																																																																																																																																													
Appropriation for 1919..... 61,500	Estimate for 1920..... 94,960																																																																																																																																																																													
Appropriation for 1920..... 77,750	Estimate for 1921..... 100,000																																																																																																																																																																													
Appropriation for 1921..... 70,000	Estimate for 1922..... 70,000																																																																																																																																																																													
<table><tr><th>Employees.</th><th>Rate.</th><th>Estimated, 1922.</th><th>Appropriated, 1921.</th><th>Expended, 1920.</th></tr><tr><td colspan="5"><i>Salaries:</i></td></tr><tr><td>Specialist (temporary).....per annum</td><td>\$2,750.00</td><td><i>Number.</i></td><td><i>Number.</i></td><td><i>Number.</i></td></tr><tr><td>Assistant (temporary).....do</td><td>3,000.00</td><td>1</td><td>1</td><td>4</td></tr><tr><td>Assistant.....do</td><td>2,520.00</td><td>1</td><td>1</td><td>1</td></tr><tr><td>Assistant (temporary).....do</td><td>2,500.00</td><td></td><td></td><td>1</td></tr><tr><td>Assistant.....do</td><td>2,400.00</td><td></td><td>1</td><td>1</td></tr><tr><td>Assistant (temporary).....do</td><td>2,160.00</td><td></td><td></td><td>1</td></tr><tr><td>Assistant.....do</td><td>2,100.00</td><td></td><td></td><td>2</td></tr><tr><td>Assistant.....do</td><td>2,040.00</td><td></td><td></td><td>1</td></tr><tr><td>Assistant (temporary).....do</td><td>1,500.00</td><td>1</td><td>1</td><td>1</td></tr><tr><td>Agent (temporary).....do</td><td>2,500.00</td><td></td><td></td><td>2</td></tr><tr><td>Agent (temporary).....do</td><td>2,400.00</td><td>1</td><td>1</td><td>1</td></tr><tr><td>Agent.....do</td><td>2,100.00</td><td>4</td><td>4</td><td>3</td></tr><tr><td>Agent.....do</td><td>2,040.00</td><td></td><td></td><td>2</td></tr><tr><td>Agent.....do</td><td>2,000.00</td><td></td><td></td><td>2</td></tr><tr><td>Agent (temporary).....do</td><td>1,980.00</td><td></td><td></td><td>1</td></tr><tr><td>Agent.....do</td><td>1,800.00</td><td>4</td><td>4</td><td>5</td></tr><tr><td>Agent.....do</td><td>1,700.00</td><td>1</td><td>1</td><td>2</td></tr><tr><td>Agent.....do</td><td>1,680.00</td><td>1</td><td>1</td><td>1</td></tr><tr><td>Agent.....do</td><td>1,500.00</td><td>7</td><td>7</td><td>6</td></tr><tr><td>Agent.....do</td><td>1,350.00</td><td></td><td></td><td>1</td></tr><tr><td>Agent.....do</td><td>1,200.00</td><td>9</td><td>5</td><td>10</td></tr><tr><td>Agent.....do</td><td>1,020.00</td><td></td><td></td><td>1</td></tr><tr><td>Agent.....do</td><td>1,000.00</td><td></td><td></td><td>1</td></tr><tr><td>Agents, clerks, collaborators, and charwoman, \$960 to \$1.....do</td><td></td><td>18</td><td>18</td><td>25</td></tr><tr><td></td><td></td><td>52</td><td>45</td><td>75</td></tr><tr><td>Salaries.....</td><td></td><td>\$61,620.00</td><td>59,220.00</td><td>58,192.05</td></tr><tr><td colspan="5"><i>OTHER OBJECTS OF EXPENDITURE.</i></td></tr><tr><td>Stationery.....</td><td></td><td>1,700.00</td><td>1,700.00</td><td>1,685.06</td></tr><tr><td>Traveling expenses.....</td><td></td><td>5,000.00</td><td>5,000.00</td><td>8,098.19</td></tr><tr><td>Telephone and telegraph service.....</td><td></td><td>700.00</td><td>700.00</td><td>752.13</td></tr><tr><td>Miscellaneous items.....</td><td></td><td>980.00</td><td>3,380.00</td><td>1,648.54</td></tr><tr><td>Total.....</td><td></td><td>70,000.00</td><td>70,000.00</td><td>70,375.97</td></tr></table>			Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.	<i>Salaries:</i>					Specialist (temporary).....per annum	\$2,750.00	<i>Number.</i>	<i>Number.</i>	<i>Number.</i>	Assistant (temporary).....do	3,000.00	1	1	4	Assistant.....do	2,520.00	1	1	1	Assistant (temporary).....do	2,500.00			1	Assistant.....do	2,400.00		1	1	Assistant (temporary).....do	2,160.00			1	Assistant.....do	2,100.00			2	Assistant.....do	2,040.00			1	Assistant (temporary).....do	1,500.00	1	1	1	Agent (temporary).....do	2,500.00			2	Agent (temporary).....do	2,400.00	1	1	1	Agent.....do	2,100.00	4	4	3	Agent.....do	2,040.00			2	Agent.....do	2,000.00			2	Agent (temporary).....do	1,980.00			1	Agent.....do	1,800.00	4	4	5	Agent.....do	1,700.00	1	1	2	Agent.....do	1,680.00	1	1	1	Agent.....do	1,500.00	7	7	6	Agent.....do	1,350.00			1	Agent.....do	1,200.00	9	5	10	Agent.....do	1,020.00			1	Agent.....do	1,000.00			1	Agents, clerks, collaborators, and charwoman, \$960 to \$1.....do		18	18	25			52	45	75	Salaries.....		\$61,620.00	59,220.00	58,192.05	<i>OTHER OBJECTS OF EXPENDITURE.</i>					Stationery.....		1,700.00	1,700.00	1,685.06	Traveling expenses.....		5,000.00	5,000.00	8,098.19	Telephone and telegraph service.....		700.00	700.00	752.13	Miscellaneous items.....		980.00	3,380.00	1,648.54	Total.....		70,000.00	70,000.00	70,375.97		
Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.																																																																																																																																																																										
<i>Salaries:</i>																																																																																																																																																																														
Specialist (temporary).....per annum	\$2,750.00	<i>Number.</i>	<i>Number.</i>	<i>Number.</i>																																																																																																																																																																										
Assistant (temporary).....do	3,000.00	1	1	4																																																																																																																																																																										
Assistant.....do	2,520.00	1	1	1																																																																																																																																																																										
Assistant (temporary).....do	2,500.00			1																																																																																																																																																																										
Assistant.....do	2,400.00		1	1																																																																																																																																																																										
Assistant (temporary).....do	2,160.00			1																																																																																																																																																																										
Assistant.....do	2,100.00			2																																																																																																																																																																										
Assistant.....do	2,040.00			1																																																																																																																																																																										
Assistant (temporary).....do	1,500.00	1	1	1																																																																																																																																																																										
Agent (temporary).....do	2,500.00			2																																																																																																																																																																										
Agent (temporary).....do	2,400.00	1	1	1																																																																																																																																																																										
Agent.....do	2,100.00	4	4	3																																																																																																																																																																										
Agent.....do	2,040.00			2																																																																																																																																																																										
Agent.....do	2,000.00			2																																																																																																																																																																										
Agent (temporary).....do	1,980.00			1																																																																																																																																																																										
Agent.....do	1,800.00	4	4	5																																																																																																																																																																										
Agent.....do	1,700.00	1	1	2																																																																																																																																																																										
Agent.....do	1,680.00	1	1	1																																																																																																																																																																										
Agent.....do	1,500.00	7	7	6																																																																																																																																																																										
Agent.....do	1,350.00			1																																																																																																																																																																										
Agent.....do	1,200.00	9	5	10																																																																																																																																																																										
Agent.....do	1,020.00			1																																																																																																																																																																										
Agent.....do	1,000.00			1																																																																																																																																																																										
Agents, clerks, collaborators, and charwoman, \$960 to \$1.....do		18	18	25																																																																																																																																																																										
		52	45	75																																																																																																																																																																										
Salaries.....		\$61,620.00	59,220.00	58,192.05																																																																																																																																																																										
<i>OTHER OBJECTS OF EXPENDITURE.</i>																																																																																																																																																																														
Stationery.....		1,700.00	1,700.00	1,685.06																																																																																																																																																																										
Traveling expenses.....		5,000.00	5,000.00	8,098.19																																																																																																																																																																										
Telephone and telegraph service.....		700.00	700.00	752.13																																																																																																																																																																										
Miscellaneous items.....		980.00	3,380.00	1,648.54																																																																																																																																																																										
Total.....		70,000.00	70,000.00	70,375.97																																																																																																																																																																										
NOTE.—All agents listed are cooperative employees. In addition to the salaries paid by the Bureau of Markets they receive salaries from other sources ranging from \$300 to \$3,150.																																																																																																																																																																														
(83) For investigating the handling, grading, and transportation of grain, including the grain sorghums, for the purpose of fixing definite grades thereof [\$71,150] (<i>same acts</i>)....		69,950.00																																																																																																																																																																												
Appropriation for 1912..... \$57,080	Estimate for 1913..... \$55,640																																																																																																																																																																													
Appropriation for 1913..... 55,640	Estimate for 1914..... 75,640																																																																																																																																																																													
Appropriation for 1914..... 65,000	Estimate for 1915..... 76,320																																																																																																																																																																													
Appropriation for 1915..... 76,320	Estimate for 1916..... 72,920																																																																																																																																																																													
Appropriation for 1916..... 72,920	Estimate for 1917..... 109,920																																																																																																																																																																													
Appropriation for 1917..... 88,770	Estimate for 1918..... 106,590																																																																																																																																																																													
Appropriation for 1918..... 106,590	Estimate for 1919..... 92,750																																																																																																																																																																													
Appropriation for 1919..... 92,750	Estimate for 1920..... 86,050																																																																																																																																																																													
Appropriation for 1920..... 86,050	Estimate for 1921..... 81,150																																																																																																																																																																													
Appropriation for 1921..... 71,150	Estimate for 1922..... 69,950																																																																																																																																																																													
NOTE.—The apparent decrease in this item is due to the transfer to the statutory roll of 1 custodian of supplies at \$1,200.																																																																																																																																																																														

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.																																																																																																																																																																																																																												
<i>General Expenses, Bureau of Markets and Crop Estimates—Continued.</i>																																																																																																																																																																																																																														
<table><thead><tr><th>Employees.</th><th>Rate.</th><th>Estimated, 1922.</th><th>Appropriated, 1921.</th><th>Ex- pended, 1920.</th></tr></thead><tbody><tr><td colspan="5">Salaries:</td></tr><tr><td>Specialist.....per annum..</td><td>\$3,000.00</td><td><i>Number.</i> 1</td><td><i>Number.</i> 1</td><td><i>Number.</i> 1</td></tr><tr><td>Specialist.....do.....</td><td>2,500.00</td><td>1</td><td>1</td><td>1</td></tr><tr><td>Specialist.....do.....</td><td>2,400.00</td><td>1</td><td>1</td><td>1</td></tr><tr><td>Specialist (temporary).....do.....</td><td>2,100.00</td><td></td><td></td><td>1</td></tr><tr><td>Supervisor.....do.....</td><td>3,500.00</td><td>2</td><td>2</td><td>1</td></tr><tr><td>Supervisor.....do.....</td><td>3,240.00</td><td></td><td></td><td>1</td></tr><tr><td>Supervisor.....do.....</td><td>3,000.00</td><td>1</td><td>1</td><td></td></tr><tr><td>Supervisor (temporary).....do.....</td><td>2,700.00</td><td></td><td></td><td>1</td></tr><tr><td>Supervisor.....do.....</td><td>2,500.00</td><td></td><td></td><td>1</td></tr><tr><td>Supervisor.....do.....</td><td>2,400.00</td><td>1</td><td>1</td><td></td></tr><tr><td>Supervisor.....do.....</td><td>2,160.00</td><td></td><td></td><td>1</td></tr><tr><td>Supervisor (temporary).....do.....</td><td>1,980.00</td><td></td><td></td><td>1</td></tr><tr><td>Supervisor (temporary).....do.....</td><td>1,800.00</td><td></td><td></td><td>1</td></tr><tr><td>Investigator.....do.....</td><td>2,520.00</td><td>2</td><td>2</td><td>2</td></tr><tr><td>Investigator.....do.....</td><td>2,500.00</td><td>1</td><td>1</td><td></td></tr><tr><td>Investigator.....do.....</td><td>2,280.00</td><td></td><td></td><td>1</td></tr><tr><td>Investigator.....do.....</td><td>2,220.00</td><td>1</td><td>1</td><td>1</td></tr><tr><td>Assistant (temporary).....do.....</td><td>2,400.00</td><td></td><td></td><td>1</td></tr><tr><td>Assistant (temporary).....do.....</td><td>2,100.00</td><td></td><td></td><td>1</td></tr><tr><td>Assistant.....do.....</td><td>2,040.00</td><td>2</td><td>2</td><td>1</td></tr><tr><td>Assistant.....do.....</td><td>1,980.00</td><td>2</td><td>2</td><td>4</td></tr><tr><td>Assistant.....do.....</td><td>1,920.00</td><td>1</td><td>1</td><td></td></tr><tr><td>Assistant.....do.....</td><td>1,860.00</td><td>1</td><td>1</td><td></td></tr><tr><td>Assistant.....do.....</td><td>1,800.00</td><td>5</td><td>5</td><td>6</td></tr><tr><td>Assistant.....do.....</td><td>1,500.00</td><td>1</td><td>1</td><td></td></tr><tr><td>Assistant (temporary).....do.....</td><td>1,440.00</td><td></td><td></td><td>1</td></tr><tr><td>Assistant (part time).....do.....</td><td>1,380.00</td><td></td><td></td><td>1</td></tr><tr><td>Assistant (temporary).....do.....</td><td>1,200.00</td><td></td><td></td><td>3</td></tr><tr><td>Sampler (part time).....do.....</td><td>1,560.00</td><td></td><td></td><td>1</td></tr><tr><td>Sampler (part time).....do.....</td><td>1,500.00</td><td></td><td></td><td>2</td></tr><tr><td>Sampler (part time).....do.....</td><td>1,200.00</td><td></td><td></td><td>1</td></tr><tr><td>Aids, \$1,320 to \$960.....do.....</td><td></td><td>2</td><td>2</td><td>4</td></tr><tr><td>Clerks (temporary), \$1,600 to \$1,000.....do.....</td><td></td><td></td><td></td><td>6</td></tr><tr><td>Custodian of supplies.....do.....</td><td>1,200.00</td><td></td><td></td><td>1</td></tr><tr><td>Messenger boy (temporary).....do.....</td><td>480.00</td><td></td><td></td><td>1</td></tr><tr><td></td><td></td><td>25</td><td>25</td><td>49</td></tr><tr><td>Salaries.....</td><td></td><td>\$54,780.00</td><td>\$54,780.00</td><td>\$62,330.92</td></tr><tr><td colspan="5">OTHER OBJECTS OF EXPENDITURE.</td></tr><tr><td>Traveling expenses.....</td><td></td><td>10,000.00</td><td>10,000.00</td><td>12,055.58</td></tr><tr><td>Equipment and material.....</td><td></td><td>3,000.00</td><td>3,000.00</td><td>5,060.28</td></tr><tr><td>Miscellaneous items.....</td><td></td><td>2,170.00</td><td>3,370.00</td><td>5,755.99</td></tr><tr><td>Total.....</td><td></td><td>69,950.00</td><td>71,150.00</td><td>85,262.77</td></tr></tbody></table>	Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Ex- pended, 1920.	Salaries:					Specialist.....per annum..	\$3,000.00	<i>Number.</i> 1	<i>Number.</i> 1	<i>Number.</i> 1	Specialist.....do.....	2,500.00	1	1	1	Specialist.....do.....	2,400.00	1	1	1	Specialist (temporary).....do.....	2,100.00			1	Supervisor.....do.....	3,500.00	2	2	1	Supervisor.....do.....	3,240.00			1	Supervisor.....do.....	3,000.00	1	1		Supervisor (temporary).....do.....	2,700.00			1	Supervisor.....do.....	2,500.00			1	Supervisor.....do.....	2,400.00	1	1		Supervisor.....do.....	2,160.00			1	Supervisor (temporary).....do.....	1,980.00			1	Supervisor (temporary).....do.....	1,800.00			1	Investigator.....do.....	2,520.00	2	2	2	Investigator.....do.....	2,500.00	1	1		Investigator.....do.....	2,280.00			1	Investigator.....do.....	2,220.00	1	1	1	Assistant (temporary).....do.....	2,400.00			1	Assistant (temporary).....do.....	2,100.00			1	Assistant.....do.....	2,040.00	2	2	1	Assistant.....do.....	1,980.00	2	2	4	Assistant.....do.....	1,920.00	1	1		Assistant.....do.....	1,860.00	1	1		Assistant.....do.....	1,800.00	5	5	6	Assistant.....do.....	1,500.00	1	1		Assistant (temporary).....do.....	1,440.00			1	Assistant (part time).....do.....	1,380.00			1	Assistant (temporary).....do.....	1,200.00			3	Sampler (part time).....do.....	1,560.00			1	Sampler (part time).....do.....	1,500.00			2	Sampler (part time).....do.....	1,200.00			1	Aids, \$1,320 to \$960.....do.....		2	2	4	Clerks (temporary), \$1,600 to \$1,000.....do.....				6	Custodian of supplies.....do.....	1,200.00			1	Messenger boy (temporary).....do.....	480.00			1			25	25	49	Salaries.....		\$54,780.00	\$54,780.00	\$62,330.92	OTHER OBJECTS OF EXPENDITURE.					Traveling expenses.....		10,000.00	10,000.00	12,055.58	Equipment and material.....		3,000.00	3,000.00	5,060.28	Miscellaneous items.....		2,170.00	3,370.00	5,755.99	Total.....		69,950.00	71,150.00	85,262.77		
Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Ex- pended, 1920.																																																																																																																																																																																																																										
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Specialist.....per annum..	\$3,000.00	<i>Number.</i> 1	<i>Number.</i> 1	<i>Number.</i> 1																																																																																																																																																																																																																										
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Supervisor.....do.....	3,500.00	2	2	1																																																																																																																																																																																																																										
Supervisor.....do.....	3,240.00			1																																																																																																																																																																																																																										
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Supervisor (temporary).....do.....	1,980.00			1																																																																																																																																																																																																																										
Supervisor (temporary).....do.....	1,800.00			1																																																																																																																																																																																																																										
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Investigator.....do.....	2,500.00	1	1																																																																																																																																																																																																																											
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Investigator.....do.....	2,220.00	1	1	1																																																																																																																																																																																																																										
Assistant (temporary).....do.....	2,400.00			1																																																																																																																																																																																																																										
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Assistant.....do.....	1,920.00	1	1																																																																																																																																																																																																																											
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Assistant (temporary).....do.....	1,440.00			1																																																																																																																																																																																																																										
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Salaries.....		\$54,780.00	\$54,780.00	\$62,330.92																																																																																																																																																																																																																										
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Traveling expenses.....		10,000.00	10,000.00	12,055.58																																																																																																																																																																																																																										
Equipment and material.....		3,000.00	3,000.00	5,060.28																																																																																																																																																																																																																										
Miscellaneous items.....		2,170.00	3,370.00	5,755.99																																																																																																																																																																																																																										
Total.....		69,950.00	71,150.00	85,262.77																																																																																																																																																																																																																										

- (84) *For collecting and disseminating to American producers, importers, exporters, and other interested persons, information relative to the world supply of and need for American agricultural products, marketing methods, conditions, prices, and other factors, a knowledge of which is necessary to the advantageous disposition of such products in foreign countries, independently and in cooperation with other branches of the Government, State agencies, purchasing and consuming organizations, and persons engaged in the transportation, marketing, and distribution of farm and food products, including the purchase of such books and periodicals as may be necessary in connection with this work (submitted) ----- \$100,000.00*

NOTE.—This is a new item. All the work now being done in foreign marketing investigations is prosecuted under an allotment of \$34,000 provided by the appropriation for marketing and distributing farm products (item 74). Including the transfer of these funds to the present paragraph (item 84), and also the transfer to the statutory roll from the item for marketing and distribution of 1 clerk at \$1,100 for assignment to the foreign marketing work, the actual increase for these investigations is \$67,100.

American producers and exporters are coming to realize more and more keenly the effect which foreign markets have on domestic prices and are making urgent requests for more adequate information, not only regarding conditions to be encountered abroad by American exporters, but regarding world supply and demand for farm products. This estimate is made with the view of establishing a world market reporting service to secure information along these lines. It does not contemplate covering the entire field, but the sum requested would enable the Bureau of Markets and Crop Estimates, with the information already in its possession, to undertake the work on a fairly adequate scale.

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
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General Expenses, Bureau of Markets and Crop Estimates—Continued.

The foreign marketing service which the bureau is now conducting, though exceedingly limited in scope on account of the scarcity of funds, has been very well received and seems to be supplying a long-felt need. No Government agency has ever attempted to cover the foreign field with respect to agricultural products, the Bureau of Foreign and Domestic Commerce, for example, dealing primarily with manufactured articles. At the present time the Department of Agriculture maintains an agricultural commissioner in London to cover the United Kingdom and one live-stock expert in South America to follow up and renew the successful efforts made last year to develop a trade in pure-bred live stock with South American countries.

Employees.	Rate.	Estimated, 1922.	Appropriated, 1921. ¹	Expended, 1920. ¹
Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>
Specialist.....per annum..	\$4,260.00	1	.....	.....
Economist.....do.....	4,500.00	1	.....	.....
Commissioner.....do.....	4,500.00	5	.....	.....
Commissioner.....do.....	4,000.00	2	.....	.....
Assistant.....do.....	2,500.00	2	.....	.....
Assistant.....do.....	2,280.00	1	.....	.....
Assistant.....do.....	1,680.00	1	.....	.....
Secretary (foreign office).....do.....	1,800.00	5	.....	.....
Clerk.....do.....	1,200.00	2	.....	.....
		20	.....	.....
Salaries.....		\$59,620.00	.....	.....
ALL OTHER OBJECTS OF EXPENDITURE.				
Stationery.....		500.00	.....	.....
Traveling expenses.....		20,000.00	.....	.....
Equipment and material.....		5,380.00	.....	.....
Telephone and telegraph service.....		4,500.00	.....	.....
Miscellaneous items.....		10,000.00	.....	.....
Total.....		100,000.00	.....	.....

¹ During 1920 and 1921 this work was carried on under the appropriation for "Marketing and distributing farm products."

- (85) *For collecting, compiling, abstracting, analyzing, summarizing, interpreting and publishing data relating to agriculture, including crop and live-stock estimates, acreage, yield, grades, stocks and value of farm crops and numbers, grades and value of live stock and live-stock products on farms (submitted) . . . \$590,741.00*

NOTE.—This new item provides for the crop-estimating work at present conducted by the Bureau of Crop Estimates. The amount recommended (\$590,741) represents an actual increase over existing funds of \$422,665, which is requested for the following purposes:

(a) \$121,765 to reestablish and properly develop the reports on the commercial production of truck and fruit crops, potatoes, cotton, tobacco, and rice, which were discontinued on July 1, 1920, on account of a reduction in funds. The suspension of this service has brought much complaint and criticism from producers and others who are dependent upon the unbiased reports of the department for essential information regarding crop conditions.

(b) \$141,330 for estimating the numbers, grades and value of live stock and live-stock products on farms. The live-stock industry of the country represents an investment of over \$10,000,000,000. The allotment for furnishing basic information on which live-stock growers might formulate breeding and marketing plans in the past has been approximately \$40,000, an amount sufficient only to estimate once a year the total number of each kind of live stock, the number of brood sows, losses from disease and exposure, and prices. No attempt can be made without additional funds to estimate dairy and poultry production, numbers on feed, numbers which will be ready for marketing in 30, 60, or 90 days, or at other intervals, numbers by age and sex classifications, or estimates at sufficiently frequent intervals to compare with the estimates of crops now issued.

(c) \$48,000 for estimating and reporting monthly acreage, condition, yield, and total production of crops by counties. The department is constantly called upon for detailed information with reference to localized crop production. Information of this character is vital not only to farmers' organizations in planning for cooperative marketing but to practically all interests which in any way serve the farmers. Among these may be mentioned the railroad companies whose plans for the transportation of farm products depend on satisfactory information as to the

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
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General Expenses, Bureau of Markets and Crop Estimates—Continued.

quantities to be transported and the counties in which the demand for cars will arise.

(d) \$28,000 for cooperation with the States Relations Service. The present appropriation act authorizes cooperation between the Bureau of Crop Estimates and the States Relations Service in the collection of crop and live-stock data. In order to make this cooperation effective, a number of specialists trained in crop-reporting work should be employed whose duty it shall be to effect the greatest measure of practicable cooperation between two field services organized along different lines and conducted with totally different objects in view, and, by cooperation with extension leaders and county agents, to bring about a more complete understanding and utilization of crop estimates.

(e) \$15,000 for increased work in translating, analyzing, interpreting, and publishing statistics relating to foreign agriculture.

(f) \$68,570 for placing the present service on a proper basis of efficiency. At the present time insufficient funds are available for renewing worn-out equipment, purchasing needed appliances for statistical offices in the field, performing necessary travel, obtaining suitable quarters where rooms are not available in Federal buildings, or taking advantage of the telegraphic, telephone, or cable services where quick communication is necessary. Under reduced appropriations, the allotments to field agents for station and travel expenses have been seriously curtailed. Where field men should have allotments of \$2,000 each per annum for travel and station expenses, they are now limited to approximately \$300, which is barely sufficient to meet their necessary station expenses, with the result that in many cases travel is practically entirely eliminated, actual observations of crop conditions by trained agricultural statisticians is rendered impossible, and dependence must be placed almost wholly on reports received by mail from voluntary observers.

Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.
Salaries:		Number.	Number.	Number.
Associate chief of bureau.....per annum..	\$4,500.00	1	.....	.....
Statistician.....do.....	4,000.00	1	1	1
Chief, division of crop records				
and research.....do.....	3,000.00	1	.....	.....
Statistical scientist.....do.....	3,501.00	1	.....	.....
Statistical scientists.....do.....	3,000.00	2	.....	.....
Statistical scientist.....do.....	2,520.00	1	.....	.....
Chief of field service.....do.....	3,360.00	1	1	.....
Chief of field service.....do.....	3,000.00	.....	.....	1
Chief of field service.....do.....	2,760.00	.....	.....	1
Field specialist.....do.....	2,760.00	1	.....	1
Foreign specialist.....do.....	4,500.00	3	.....	.....
Officer in charge of field records.....do.....	2,520.00	1	1	.....
Officer in charge of field records.....do.....	2,400.00	.....	.....	1
Agricultural statistician.....do.....	2,760.00	3	1	.....
Agricultural statistician.....do.....	2,520.00	18	18	.....
Agricultural statistician.....do.....	2,400.00	5	5	.....
Agricultural statistician.....do.....	2,200.00	9	9	.....
Agricultural statistician.....do.....	2,040.00	3	3	.....
Cotton statistician.....do.....	2,400.00	1	1	.....
Field agent, \$2,520 to \$1,200.....do.....	.....	3	3	57
Extension specialists.....do.....	4,000.00	4	.....	.....
Crop specialist.....do.....	3,300.00	2	.....	.....
Crop specialist.....do.....	3,000.00	7	.....	.....
Crop specialist.....do.....	2,760.00	6	.....	.....
Crop specialist.....do.....	2,520.00	2	1	2
Crop specialist, \$2,280 to \$1,800.....do.....	.....	1	.....	13
Life-stock specialist.....do.....	3,300.00	1	.....	.....
Life-stock specialists.....do.....	3,000.00	3	.....	.....
Life-stock specialists.....do.....	2,760.00	3	.....	.....
Junior statistician.....do.....	1,800.00	20	.....	.....
Field clerks.....do.....	1,400.00	6	2	.....
Field clerks.....do.....	1,200.00	31	18	6
Field clerks.....do.....	1,100.00	2	2	2
Field clerks.....do.....	1,000.00	29	9	7
Field clerks and collaborators,				
\$900 to \$1.....do.....	.....	30	36	35
Miscellaneous temporary clerks,				
\$100 to \$75.....per month.....	.....	60	15	.....
		251	126	127
Salaries.....		\$337,291.00	\$146,500.00	\$147,540.00
OTHER OBJECTS OF EXPENDITURE.				
Stationery.....	25,000.00	4,000.00	22,010.00	
Traveling expenses.....	197,450.00	10,000.00	34,350.00	
Equipment and material.....	15,000.00	1,750.00	5,100.00	
Telephone and telegraph service.....	6,000.00	2,000.00	3,000.00	
Rent.....	5,000.00	2,225.00	2,162.00	
Miscellaneous items.....	5,000.00	1,600.00	2,000.00	
Total.....		590,741.00	168,076.00	216,162.00

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Bureau of Markets and Crop Estimates—Continued.</i>		
(86) [To enable the Secretary of Agriculture to carry into effect the act entitled "An act to fix standards for Climax baskets for grapes and other fruits and vegetables, and to fix standards for baskets and other containers for small fruits, berries, and vegetables, and for other purposes" approved Aug. 31, 1916, including the employment of such persons and means as the Secretary of Agriculture may deem necessary, in the city of Washington and elsewhere. \$3,800.]		
NOTE.—It is proposed to transfer this item from its present place under the heading of "General Expenses" and include it among the other regulatory items of the Bureau of Markets and Crop Estimates, where it properly belongs. (See item 92.)		
(87) For general administrative expenses in connection with the lines of investigation, experiment, and demonstration conducted in the Bureau of Markets and Crop Estimates [\$20,635] (acts Mar. 4, 1913, vol. 37, p. 854, sec. 1; May 31, 1920, vol. 41, p. 723, sec. 1)	\$30,000.00	
Appropriation for 1916..... \$23,250	Estimate for 1917..... \$23,720	
Appropriation for 1917..... 19,500	Estimate for 1918..... 20,105	
Appropriation for 1918..... 20,105	Estimate for 1919..... 23,530	
Appropriation for 1919..... 19,635	Estimate for 1920..... 24,635	
Appropriation for 1920..... 20,635	Estimate for 1921..... 20,635	
Appropriation for 1921..... 20,635	Estimate for 1922..... 30,000	
NOTE.—There is an increase of \$9,365 in this item to provide for additional administrative expenses by reason of the consolidation of the Bureaus of Markets and Crop Estimates. As \$20,000 is at present provided for the administrative expenses of the latter bureau, there is in reality a decrease of \$10,635 in the total appropriations of the two bureaus for general administration.		
Employees.	Rate.	Estimated, 1922.
		Appropriated, 1921.
		Ex-pended, 1920.
Salaries:		Number.
Specialist (part time).....per annum..	\$4,260.00	Number.
Specialist.....do.....	4,000.00	Number.
Assistant.....do.....	2,280.00	Number.
Assistant.....do.....	2,100.00	Number.
Assistant.....do.....	1,800.00	Number.
Assistant (temporary).....do.....	1,600.00	Number.
Assistant (temporary).....do.....	1,500.00	Number.
Clerk (temporary).....do.....	1,800.00	Number.
Clerk (temporary).....do.....	1,600.00	Number.
		5
		5
		8
Salaries.....	\$12,460.00	\$11,680.00
OTHER OBJECTS OF EXPENDITURE.		
Stationery.....	2,735.00	500.00
Traveling expenses.....	3,500.00	2,700.00
Equipment and material.....	4,300.00	2,200.00
Telephone and telegraph service.....	2,200.00	2,000.00
Miscellaneous items.....	4,805.00	1,555.00
Total.....	30,000.00	20,635.00
In all, for general expenses.....	\$2,290,011.00	\$1,096,825.00
Appropriation for 1914..... \$50,000	Estimate for 1915..... \$194,140	
Appropriation for 1915..... 240,000	Estimate for 1916..... 376,595	
Appropriation for 1916..... 352,650	Estimate for 1917..... 579,421	
Appropriation for 1917..... 621,860	Estimate for 1918..... 808,995	
Appropriation for 1918..... 843,395	Estimate for 1919..... 1,063,800	
Appropriation for 1919..... 1,011,705	Estimate for 1920..... 1,591,805	
Appropriation for 1920..... 1,339,175	Estimate for 1921..... 1,371,105	
Appropriation for 1921..... 1,096,825	Estimate for 1922..... 2,290,011	

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.																								
<p>(88) <i>That hereafter the powers conferred and the duties imposed by law on the Bureau of Statistics and the Bureau of Crop Estimates of the Department of Agriculture shall be exercised and performed by the Bureau of Markets and Crop Estimates.</i></p> <p>NOTE.—This is new legislation, and is essential if the proposed consolidation of the Bureaus of Markets and Crop Estimates is approved. When the Bureau of Statistics of the Department of Agriculture was in existence, Congress, from time to time, through statutory enactment, imposed certain duties and conferred certain powers upon that bureau. Coincident with the change in the name of the Bureau of Statistics to Bureau of Crop Estimates, which was provided for in the agricultural appropriation act for the fiscal year 1915 (38 Stat., 436), Congress enacted the following provision of law, in order to obviate any question as to the legal right of the Bureau of Crop Estimates to thereafter exercise and perform the powers and duties previously imposed by law upon the Bureau of Statistics:</p> <p>“That hereafter the powers conferred and the duties imposed by law on the Bureau of Statistics of the Department of Agriculture shall be exercised and performed by the Bureau of Crop Estimates.”</p> <p>The above provision is therefore recommended, so as to authorize the Bureau of Markets and Crop Estimates to hereafter exercise and perform the duties and powers heretofore conferred by law on the Bureau of Statistics and the Bureau of Crop Estimates.</p> <p><i>Enforcement of the United States Cotton-Futures Act—</i></p> <p>(89) To enable the Secretary of Agriculture to carry into effect the provisions of the United States cotton-futures act, as amended March 4, 1919, including all expenses necessary for the purchase of equipment and supplies; for travel; for the employment of persons in the city of Washington and elsewhere; and for all other expenses, including rent outside of the District of Columbia, that may be necessary in executing the provisions of this act, \$142,611: <i>Provided, [That the amendments relating to cotton provided for in section 6 of the act known as the wheat guarantee act, approved March 4, 1919, are hereby recognized and declared to be permanent legislation.] That any moneys received from or in connection with the sale of cotton purchased for the preparation of practical forms of the official cotton standards and condemned as unsuitable for such use, may be expended by the Secretary of Agriculture during the fiscal year ending June 30, 1922, for the purchase of other cotton for such use.</i></p> <p>[That hereafter each lot of cotton classified as tenderable in whole or in part on a section 5 contract of said act as amended, shall give to the buyer the right to demand that one-half of the contract shall be delivered in the official cotton standard grades of the United States from the grades of middling fair, strict good middling, good middling, strict middling, and middling, and that the seller shall have the option of delivering the other half of said contract from any of the official cotton standard grades as established in said act.] (acts May 23, 1908, vol. 35, p. 256, sec. 1; June 30, 1914, vol. 38, p. 422, sec. 1; Aug. 18, 1914, vol. 38, pp. 693–698, secs. 1–21; Mar. 4, 1915, vol. 38, p. 1112, sec. 1; May 31, 1920, vol. 41, p. 725, sec. 1) -----</p>	\$142, 611. 00	\$142, 611. 00																								
<table><tr><td>Appropriation for 1916.....</td><td>\$75,000</td><td>Estimate for 1917.....</td><td>\$120,750</td></tr><tr><td>Appropriation for 1917.....</td><td>120,750</td><td>Estimate for 1918.....</td><td>98,600</td></tr><tr><td>Appropriation for 1918.....</td><td>98,600</td><td>Estimate for 1919.....</td><td>88,580</td></tr><tr><td>Appropriation for 1919.....</td><td>113,580</td><td>Estimate for 1920.....</td><td>131,780</td></tr><tr><td>Appropriation for 1920.....</td><td>131,780</td><td>Estimate for 1921.....</td><td>198,920</td></tr><tr><td>Appropriation for 1921.....</td><td>142,611</td><td>Estimate for 1922.....</td><td>142,611</td></tr></table>	Appropriation for 1916.....	\$75,000	Estimate for 1917.....	\$120,750	Appropriation for 1917.....	120,750	Estimate for 1918.....	98,600	Appropriation for 1918.....	98,600	Estimate for 1919.....	88,580	Appropriation for 1919.....	113,580	Estimate for 1920.....	131,780	Appropriation for 1920.....	131,780	Estimate for 1921.....	198,920	Appropriation for 1921.....	142,611	Estimate for 1922.....	142,611		
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Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.																																																																																																																																																																																																																																																																				
<i>Enforcement of the United States Cotton-Futures Act—Continued.</i>																																																																																																																																																																																																																																																																						
<p>NOTE.—While there is apparently no change in the amount of this item, taking into consideration the transfer to the statutory roll of 1 laborer, at \$900, and 4 at \$720 each, the actual increase is \$3,780. The work imposed upon the department in connection with the enforcement of the cotton-futures act is mandatory, leaving no freedom of choice as to the particular activities which must be conducted. In order that this work may properly be discharged, the full amount of the present appropriation will be necessary for the ensuing fiscal year.</p> <p>The language of the paragraph has been amended by the elimination of the first proviso, which is now permanent legislation, and by omitting the clause, known as the Comer amendment, which was repealed by H. J. Res. 370, 66th Cong., but was included, through error, in the agricultural appropriation act for the current fiscal year.</p> <p>The new proviso at the end of the paragraph is designed to permit the use of proceeds derived from the sale of cotton originally purchased for the preparation of forms of the official cotton standards and condemned as unsuitable for such use, for the purchase of other cotton. In the absence of specific authority for this purpose, such proceeds must necessarily be deposited in the Treasury to the credit of miscellaneous receipts. It is exceedingly difficult to obtain cotton having the desired characteristics for use in the preparation of forms of official cotton standards, and, even though selected with the greatest care, it is often found to be unsuitable for such use. Cotton found to be unsuitable is sold and additional cotton purchased. Unless the department is permitted to use the proceeds from the sale of this cotton in the purchase of new cotton, it will obviously be deprived of a part of the appropriation made for the enforcement of the act.</p>																																																																																																																																																																																																																																																																						
<table><tr><th>Employees.</th><th>Rate.</th><th>Estimated, 1922.</th><th>Appropriated, 1921.</th><th>Expended, 1920.</th></tr><tr><td>Salaries:</td><td></td><td>Number.</td><td>Number.</td><td>Number.</td></tr><tr><td>Specialist.....per annum.....</td><td>\$4,500.00</td><td>1</td><td>1</td><td>.....</td></tr><tr><td>Specialist.....do.....</td><td>4,000.00</td><td>2</td><td>2</td><td>2</td></tr><tr><td>Specialist.....do.....</td><td>3,600.00</td><td>.....</td><td>.....</td><td>4</td></tr><tr><td>Specialist.....do.....</td><td>3,300.00</td><td>3</td><td>3</td><td>1</td></tr><tr><td>Specialist (temporary).....do.....</td><td>3,240.00</td><td>.....</td><td>.....</td><td>1</td></tr><tr><td>Specialist.....do.....</td><td>3,000.00</td><td>3</td><td>3</td><td>3</td></tr><tr><td>Specialist.....do.....</td><td>2,740.00</td><td>1</td><td>1</td><td>1</td></tr><tr><td>Specialist.....do.....</td><td>2,400.00</td><td>1</td><td>1</td><td>2</td></tr><tr><td>Technologist.....do.....</td><td>4,000.00</td><td>1</td><td>1</td><td>1</td></tr><tr><td>Investigator.....do.....</td><td>2,400.00</td><td>.....</td><td>.....</td><td>1</td></tr><tr><td>Assistant.....do.....</td><td>2,500.00</td><td>2</td><td>2</td><td>1</td></tr><tr><td>Assistant.....do.....</td><td>2,400.00</td><td>.....</td><td>.....</td><td>3</td></tr><tr><td>Assistant.....do.....</td><td>2,280.00</td><td>1</td><td>1</td><td>1</td></tr><tr><td>Assistant (part time).....do.....</td><td>2,200.00</td><td>.....</td><td>.....</td><td>1</td></tr><tr><td>Assistant.....do.....</td><td>2,100.00</td><td>2</td><td>2</td><td>.....</td></tr><tr><td>Assistant.....do.....</td><td>2,000.00</td><td>.....</td><td>.....</td><td>1</td></tr><tr><td>Assistant.....do.....</td><td>1,980.00</td><td>1</td><td>2</td><td>1</td></tr><tr><td>Assistant.....do.....</td><td>1,860.00</td><td>.....</td><td>.....</td><td>1</td></tr><tr><td>Assistant (temporary).....do.....</td><td>1,800.00</td><td>1</td><td>1</td><td>3</td></tr><tr><td>Assistant (temporary).....do.....</td><td>1,680.00</td><td>.....</td><td>.....</td><td>1</td></tr><tr><td>Assistant (temporary).....do.....</td><td>1,620.00</td><td>.....</td><td>.....</td><td>1</td></tr><tr><td>Assistant.....do.....</td><td>1,600.00</td><td>1</td><td>1</td><td>1</td></tr><tr><td>Assistant (temporary).....do.....</td><td>1,500.00</td><td>.....</td><td>.....</td><td>2</td></tr><tr><td>Assistant.....do.....</td><td>1,440.00</td><td>1</td><td>1</td><td>1</td></tr><tr><td>Classer's helpers.....do.....</td><td>1,440.00</td><td>2</td><td>2</td><td>.....</td></tr><tr><td>Classer's helper.....do.....</td><td>1,260.00</td><td>1</td><td>1</td><td>.....</td></tr><tr><td>Classer's helpers.....do.....</td><td>1,200.00</td><td>2</td><td>2</td><td>8</td></tr><tr><td>Classer's helper.....do.....</td><td>1,020.00</td><td>.....</td><td>.....</td><td>1</td></tr><tr><td>Classer's helper (temporary).....do.....</td><td>900.00</td><td>.....</td><td>.....</td><td>1</td></tr><tr><td>Clerk (temporary).....do.....</td><td>2,250.00</td><td>.....</td><td>.....</td><td>1</td></tr><tr><td>Clerk.....do.....</td><td>2,000.00</td><td>.....</td><td>.....</td><td>1</td></tr><tr><td>Clerk.....do.....</td><td>1,560.00</td><td>.....</td><td>.....</td><td>1</td></tr><tr><td>Clerk.....do.....</td><td>1,400.00</td><td>.....</td><td>.....</td><td>2</td></tr><tr><td>Clerk.....do.....</td><td>1,200.00</td><td>.....</td><td>.....</td><td>5</td></tr><tr><td>Clerk.....do.....</td><td>1,100.00</td><td>.....</td><td>.....</td><td>1</td></tr><tr><td>Clerk.....do.....</td><td>1,080.00</td><td>.....</td><td>.....</td><td>1</td></tr><tr><td>Photographer.....do.....</td><td>1,200.00</td><td>.....</td><td>.....</td><td>1</td></tr><tr><td>Wages:</td><td></td><td></td><td></td><td></td></tr><tr><td>Firemen (temporary).....do.....</td><td>1,080.00</td><td>.....</td><td>.....</td><td>2</td></tr><tr><td>Laborers, \$900 to \$96.....do.....</td><td>.....</td><td>.....</td><td>5</td><td>10</td></tr><tr><td></td><td></td><td>27</td><td>32</td><td>69</td></tr><tr><td>Salaries.....</td><td></td><td>\$65,380.00</td><td>\$67,360.00</td><td>\$49,830.91</td></tr><tr><td>Wages.....</td><td></td><td></td><td>3,780.00</td><td>3,689.50</td></tr><tr><td colspan="5">OTHER OBJECTS OF EXPENDITURE.</td></tr><tr><td>Stationery.....</td><td></td><td>7,600.00</td><td>5,000.00</td><td>314.67</td></tr><tr><td>Traveling expenses.....</td><td></td><td>19,020.00</td><td>8,000.00</td><td>6,844.65</td></tr><tr><td>Equipment and material.....</td><td></td><td>35,375.00</td><td>47,000.00</td><td>53,378.38</td></tr><tr><td>Telephone and telegraph service.....</td><td></td><td>3,000.00</td><td>1,825.00</td><td>1,481.21</td></tr><tr><td>Miscellaneous items.....</td><td></td><td>12,236.00</td><td>9,646.00</td><td>10,840.26</td></tr><tr><td>Total.....</td><td></td><td>142,611.00</td><td>142,611.00</td><td>126,359.58</td></tr></table>	Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.	Salaries:		Number.	Number.	Number.	Specialist.....per annum.....	\$4,500.00	1	1	Specialist.....do.....	4,000.00	2	2	2	Specialist.....do.....	3,600.00	4	Specialist.....do.....	3,300.00	3	3	1	Specialist (temporary).....do.....	3,240.00	1	Specialist.....do.....	3,000.00	3	3	3	Specialist.....do.....	2,740.00	1	1	1	Specialist.....do.....	2,400.00	1	1	2	Technologist.....do.....	4,000.00	1	1	1	Investigator.....do.....	2,400.00	1	Assistant.....do.....	2,500.00	2	2	1	Assistant.....do.....	2,400.00	3	Assistant.....do.....	2,280.00	1	1	1	Assistant (part time).....do.....	2,200.00	1	Assistant.....do.....	2,100.00	2	2	Assistant.....do.....	2,000.00	1	Assistant.....do.....	1,980.00	1	2	1	Assistant.....do.....	1,860.00	1	Assistant (temporary).....do.....	1,800.00	1	1	3	Assistant (temporary).....do.....	1,680.00	1	Assistant (temporary).....do.....	1,620.00	1	Assistant.....do.....	1,600.00	1	1	1	Assistant (temporary).....do.....	1,500.00	2	Assistant.....do.....	1,440.00	1	1	1	Classer's helpers.....do.....	1,440.00	2	2	Classer's helper.....do.....	1,260.00	1	1	Classer's helpers.....do.....	1,200.00	2	2	8	Classer's helper.....do.....	1,020.00	1	Classer's helper (temporary).....do.....	900.00	1	Clerk (temporary).....do.....	2,250.00	1	Clerk.....do.....	2,000.00	1	Clerk.....do.....	1,560.00	1	Clerk.....do.....	1,400.00	2	Clerk.....do.....	1,200.00	5	Clerk.....do.....	1,100.00	1	Clerk.....do.....	1,080.00	1	Photographer.....do.....	1,200.00	1	Wages:					Firemen (temporary).....do.....	1,080.00	2	Laborers, \$900 to \$96.....do.....	5	10			27	32	69	Salaries.....		\$65,380.00	\$67,360.00	\$49,830.91	Wages.....			3,780.00	3,689.50	OTHER OBJECTS OF EXPENDITURE.					Stationery.....		7,600.00	5,000.00	314.67	Traveling expenses.....		19,020.00	8,000.00	6,844.65	Equipment and material.....		35,375.00	47,000.00	53,378.38	Telephone and telegraph service.....		3,000.00	1,825.00	1,481.21	Miscellaneous items.....		12,236.00	9,646.00	10,840.26	Total.....		142,611.00	142,611.00	126,359.58		
Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.																																																																																																																																																																																																																																																																		
Salaries:		Number.	Number.	Number.																																																																																																																																																																																																																																																																		
Specialist.....per annum.....	\$4,500.00	1	1																																																																																																																																																																																																																																																																		
Specialist.....do.....	4,000.00	2	2	2																																																																																																																																																																																																																																																																		
Specialist.....do.....	3,600.00	4																																																																																																																																																																																																																																																																		
Specialist.....do.....	3,300.00	3	3	1																																																																																																																																																																																																																																																																		
Specialist (temporary).....do.....	3,240.00	1																																																																																																																																																																																																																																																																		
Specialist.....do.....	3,000.00	3	3	3																																																																																																																																																																																																																																																																		
Specialist.....do.....	2,740.00	1	1	1																																																																																																																																																																																																																																																																		
Specialist.....do.....	2,400.00	1	1	2																																																																																																																																																																																																																																																																		
Technologist.....do.....	4,000.00	1	1	1																																																																																																																																																																																																																																																																		
Investigator.....do.....	2,400.00	1																																																																																																																																																																																																																																																																		
Assistant.....do.....	2,500.00	2	2	1																																																																																																																																																																																																																																																																		
Assistant.....do.....	2,400.00	3																																																																																																																																																																																																																																																																		
Assistant.....do.....	2,280.00	1	1	1																																																																																																																																																																																																																																																																		
Assistant (part time).....do.....	2,200.00	1																																																																																																																																																																																																																																																																		
Assistant.....do.....	2,100.00	2	2																																																																																																																																																																																																																																																																		
Assistant.....do.....	2,000.00	1																																																																																																																																																																																																																																																																		
Assistant.....do.....	1,980.00	1	2	1																																																																																																																																																																																																																																																																		
Assistant.....do.....	1,860.00	1																																																																																																																																																																																																																																																																		
Assistant (temporary).....do.....	1,800.00	1	1	3																																																																																																																																																																																																																																																																		
Assistant (temporary).....do.....	1,680.00	1																																																																																																																																																																																																																																																																		
Assistant (temporary).....do.....	1,620.00	1																																																																																																																																																																																																																																																																		
Assistant.....do.....	1,600.00	1	1	1																																																																																																																																																																																																																																																																		
Assistant (temporary).....do.....	1,500.00	2																																																																																																																																																																																																																																																																		
Assistant.....do.....	1,440.00	1	1	1																																																																																																																																																																																																																																																																		
Classer's helpers.....do.....	1,440.00	2	2																																																																																																																																																																																																																																																																		
Classer's helper.....do.....	1,260.00	1	1																																																																																																																																																																																																																																																																		
Classer's helpers.....do.....	1,200.00	2	2	8																																																																																																																																																																																																																																																																		
Classer's helper.....do.....	1,020.00	1																																																																																																																																																																																																																																																																		
Classer's helper (temporary).....do.....	900.00	1																																																																																																																																																																																																																																																																		
Clerk (temporary).....do.....	2,250.00	1																																																																																																																																																																																																																																																																		
Clerk.....do.....	2,000.00	1																																																																																																																																																																																																																																																																		
Clerk.....do.....	1,560.00	1																																																																																																																																																																																																																																																																		
Clerk.....do.....	1,400.00	2																																																																																																																																																																																																																																																																		
Clerk.....do.....	1,200.00	5																																																																																																																																																																																																																																																																		
Clerk.....do.....	1,100.00	1																																																																																																																																																																																																																																																																		
Clerk.....do.....	1,080.00	1																																																																																																																																																																																																																																																																		
Photographer.....do.....	1,200.00	1																																																																																																																																																																																																																																																																		
Wages:																																																																																																																																																																																																																																																																						
Firemen (temporary).....do.....	1,080.00	2																																																																																																																																																																																																																																																																		
Laborers, \$900 to \$96.....do.....	5	10																																																																																																																																																																																																																																																																		
		27	32	69																																																																																																																																																																																																																																																																		
Salaries.....		\$65,380.00	\$67,360.00	\$49,830.91																																																																																																																																																																																																																																																																		
Wages.....			3,780.00	3,689.50																																																																																																																																																																																																																																																																		
OTHER OBJECTS OF EXPENDITURE.																																																																																																																																																																																																																																																																						
Stationery.....		7,600.00	5,000.00	314.67																																																																																																																																																																																																																																																																		
Traveling expenses.....		19,020.00	8,000.00	6,844.65																																																																																																																																																																																																																																																																		
Equipment and material.....		35,375.00	47,000.00	53,378.38																																																																																																																																																																																																																																																																		
Telephone and telegraph service.....		3,000.00	1,825.00	1,481.21																																																																																																																																																																																																																																																																		
Miscellaneous items.....		12,236.00	9,646.00	10,840.26																																																																																																																																																																																																																																																																		
Total.....		142,611.00	142,611.00	126,359.58																																																																																																																																																																																																																																																																		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
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Enforcement of the United States Grain-Standards Act—

- (90) To enable the Secretary of Agriculture to carry into effect the provisions of the United States grain-standards act, including rent outside of the District of Columbia and the employment of such persons and means as the Secretary of Agriculture may deem necessary, in the city of Washington and elsewhere, **[\$538,623]** \$728,850 (acts Aug. 11, 1916, vol. 39, pp. 482-485, secs. 1-12; May 31, 1920, vol. 41, p. 725, sec. 1)-----

\$728, 850. 00 \$538, 623. 00

Appropriation for 1917.....	\$250,000	Estimate for 1918.....	\$519,140
Appropriation for 1918.....	519,140	Estimate for 1919.....	456,580
Appropriation for 1919.....	456,580	Estimate for 1920.....	598,600
Appropriation for 1920.....	598,600	Estimate for 1921.....	571,700
Appropriation for 1921.....	538,623	Estimate for 1922.....	728,850

NOTE.—There is an apparent increase in this item of \$190,227, but as 1 clerk at \$1,560, 1 of class 2, 4 at \$1,100 each, 1 draftsman at \$1,380, and 1 messenger boy at \$600 have been transferred to the statutory roll, the actual increase is \$199,567. This increase is needed for the employment of additional grain supervisors, samplers, etc.; to enable the department to put into effect standards for milled rice, rye, and grain sorghums; and to meet the demands of the trade for closer supervision of grading of corn, wheat, and oats in the large terminal markets and at other points, as well as to cover certain primary markets not now receiving attention and to reestablish an office in the intermountain grain section of the West, probably at Ogden, Utah.

There is urgent demand at this time for the promulgation of standards for rice and rye, as well as for the grain sorghums. The investigational work on standards for milled rice, rye, and grain sorghums has been virtually completed and standards for these grains could be promulgated if sufficient funds were available for this purpose. As a matter of fact, permissive standards for milled rice have been promulgated and are now in the hands of the rice trade but, on account of lack of funds, the department is unable to make them effective under the United States grain-standards act.

Like the cotton-futures act, the grain-standards act is mandatory in its requirements, and the department must be in a position to conduct the work in an efficient manner. This can not be done unless additional funds are made available, because the entire appropriation as it now stands is based on enforcement of standards for corn, wheat, and oats only. Additional appropriations will be necessary to enable the department to promulgate and enforce standards for milled rice, grain sorghums, and rye. The appropriation for the present fiscal year was reduced nearly \$50,000, which has resulted in serious curtailment of the department's activities. Field workers are obliged to restrict their travel to a point where the proper conduct of the work is greatly impaired. Reduced allotments to the cities covered has meant that only the work of greatest importance can be undertaken and the remainder ignored. During the current year the department has available only \$15,000 for the purchase of apparatus, furniture, miscellaneous equipment, stationery, miscellaneous supplies and services, and other items. The inadequacy of this sum to cover 35 field stations is apparent.

Employees.	Rate	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.
		Number.	Number.	Number.
Salaries:				
Specialist (temporary) . . . per annum . . .	\$4,000.00	-----	-----	-----
Specialist.....do.....	3,240.00	1	1	1
Supervisor.....do.....	4,000.00	1	1	-----
Supervisor.....do.....	3,600.00	1	1	-----
Supervisor.....do.....	3,500.00	18	15	-----
Supervisor.....do.....	3,300.00	-----	-----	1
Supervisor.....do.....	3,240.00	1	1	13
Supervisor.....do.....	3,000.00	14	8	7
Supervisor.....do.....	2,880.00	1	1	2
Supervisor.....do.....	2,760.00	4	1	3
Supervisor.....do.....	2,520.00	3	3	8
Supervisor.....do.....	2,500.00	15	9	5
Supervisor.....do.....	2,460.00	2	2	1
Supervisor.....do.....	2,400.00	4	4	6
Supervisor.....do.....	2,280.00	6	6	7
Supervisor.....do.....	2,100.00	1	1	1
Supervisor.....do.....	2,040.00	13	13	5
Supervisor (part time).....do.....	1,980.00	-----	-----	1
Supervisor.....do.....	1,920.00	2	2	2
Supervisor.....do.....	1,860.00	2	2	-----
Supervisor.....do.....	1,800.00	12	12	17
Supervisor.....do.....	1,740.00	4	4	4

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.					Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>Enforcement of the United States Grain-Standards Act—Continued.</i>						
Employees.	Rate.	Esti- mated, 1922.	Appro- priated, 1921.	Ex- pended, 1920.		
Salaries—Continued.		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>		
Supervisor (part time) . . . per annum	\$1,680.00	1	1	5		
Supervisor . . . do . . .	1,620.00	1	1	1		
Supervisor (temporary) . . . do . . .	1,500.00			1		
Investigator . . . do . . .	2,640.00	1	1	1		
Investigator (temporary) . . . do . . .	2,400.00			1		
Assistant . . . do . . .	3,000.00	3	3	1		
Assistant . . . do . . .	2,520.00			1		
Assistant . . . do . . .	2,500.00	1	1			
Assistant . . . do . . .	2,460.00			1		
Assistant . . . do . . .	2,250.00	1	1	1		
Assistant . . . do . . .	2,160.00	1	1	1		
Assistant . . . do . . .	1,860.00			1		
Assistant . . . do . . .	1,800.00	4	4	7		
Assistant . . . do . . .	1,620.00	2	2	2		
Assistant . . . do . . .	1,560.00	1	1			
Assistant . . . do . . .	1,500.00			1		
Assistant . . . do . . .	1,380.00	1	1	1		
Assistant (temporary) . . . do . . .	1,200.00			1		
Sampler (temporary) . . . do . . .	1,680.00			1		
Sampler . . . do . . .	1,620.00	51	51	47		
Sampler . . . do . . .	1,560.00	3	3	4		
Sampler . . . do . . .	1,500.00	40	25	35		
Sampler . . . do . . .	1,440.00	5	5	4		
Sampler . . . do . . .	1,400.00	2	2	3		
Sampler . . . do . . .	1,380.00	1	1	4		
Clerk (temporary) . . . do . . .	1,600.00			1		
Clerk . . . do . . .	1,560.00		1	1		
Clerk . . . do . . .	1,400.00		1	2		
Clerk . . . do . . .	1,320.00			1		
Clerk (temporary) . . . do . . .	1,260.00			1		
Clerk . . . do . . .	1,200.00	10		28		
Clerk . . . do . . .	1,100.00		4	26		
Clerk . . . do . . .	1,080.00			1		
Clerk (temporary) . . . do . . .	1,000.00			7		
Draftman . . . do . . .	1,380.00		1			
Clerk, assistants, operators, collatorator, and mes- senger boys—\$900 to \$1. . . do . . .				13		
Wages:						
Laborers—\$900 to \$240. . . do . . .				4		
		234	198	294		
Salaries . . .		\$474,760.00	\$397,720.00	\$395,901.30		
Wages . . .				860.00		
OTHER OBJECTS OF EXPENDITURE.						
Stationery . . .		15,970.00	10,000.00	9,778.00		
Traveling expenses . . .		75,000.00	40,000.00	40,691.80		
Equipment and material . . .		52,445.00	25,000.00	35,047.97		
Telephone and telegraph service . . .		7,000.00	5,000.00	5,890.42		
Miscellaneous items . . .		103,675.00	60,903.00	93,622.64		
Total . . .		728,850.00	538,623.00	581,792.13		

Administration of the United States Warehouse Act—

- (91) To enable the Secretary of Agriculture to carry into effect the provisions of the United States warehouse act, including the payment of such rent outside of the District of Columbia and the employment of such persons and means as the Secretary of Agriculture may deem necessary, in the city of Washington and elsewhere, **[\$35,000]** \$100,000 (*acts Aug. 11, 1916, vol. 39, pp. 486-491, secs. 1-33; May 31, 1920, vol. 41, p. 725, sec. 1*)

\$100,000.00

\$35,000.00

Appropriation for 1917	\$50,000	Estimate for 1918	\$59,620
Appropriation for 1918	59,620	Estimate for 1919	53,540
Appropriation for 1919	53,540	Estimate for 1920	69,980
Appropriation for 1920	35,000	Estimate for 1921	80,000
Appropriation for 1921	35,000	Estimate for 1922	100,000

NOTE.—There is an apparent increase in this item of \$65,000. Inasmuch as there is available for expenditure during the current fiscal year a balance of \$26,000 from the original continuing appropriation of \$50,000 made by the agricultural appropriation act for the fiscal year 1917, the actual increase requested for the administration of the warehouse act next year is only \$39,000.

If the increase recommended is allowed, the department plans to establish four general divisions of the United States with a warehouse supervisor in charge of each, two warehouse inspectors for each division, with a stenographic clerk. Provision also should be made for a specialist to

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
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Administration of the United States Warehouse Act—Continued.

take charge of the entire work. One of the proposed divisions would probably cover the territory west of the Rocky Mountains, one the north-central territory, another the south-central territory, and a fourth the southeastern section of the country. Work in the northeastern section would be conducted directly from Washington.

Comparatively recent developments in the administration of the warehouse act have shown that the principal obstacle in the way of a widespread acceptance of the system is the department's inability to reach many of the persons interested to present the merits of the act to them and afford them opportunity to enter the Federal system, because of the small appropriation available. All the men now employed are working to the limit of their ability to do the necessary routine work. There have been numerous calls, particularly from the cotton section, for qualified men to explain the provisions of the warehouse act and the desirability of adequate warehousing facilities for the commodities to which the act applies. In many cases it has been impossible to comply with these requests. Between June 1 and November 1 of the present year the number of cotton warehousemen who have been licensed has increased from about 25 to almost 200. In addition, approximately 35 grain houses and 6 wool houses now operate under licenses. As four inspections, in addition to the original inspection, should be made annually of each licensed warehouse, it is apparent that the present force will not be able to handle this feature alone if the service is to be of value in accomplishing the purpose for which established.

If only the amount of funds available this year are allowed for the next fiscal year, the department can not carry on the educational work that is absolutely necessary to an understanding by the interested public of the provisions and purposes of the warehouse act.

Up to the present time the work has been foundational in character. While the regulations for cotton warehouses have been in effect for some time, those for grain warehouses became operative only about a year ago, those for wool quite recently, while those for tobacco warehouses are yet to be issued. It is expected that the tobacco regulations will be issued this fall. As a result, the territory within which work must be done has been extended to cover the entire United States, with a consequent increase in the travel and demands upon the time of the department's forces.

The expressions of commendation of the purposes of the warehouse act are constantly increasing, and State officials, farmers' organizations, bankers, insurance companies, and warehousemen are becoming more and more interested as time goes on. In fact, it is probable that cooperative understandings can readily be reached with a number of States, which will make the work more effective, if additional funds are made available. The American Cotton Association and the Georgia State Bureau of Markets are conducting vigorous campaigns along lines which make the extension of the work under the United States warehouse act particularly important. Requests have been received from Alabama, Arkansas, Louisiana, Oklahoma, and other States for the assignment of Federal representatives to work in the interest of the act in those States.

It should be borne in mind that, while the warehouse act is important constructive legislation, designed to facilitate the orderly and systematic marketing of staple farm products, it is not compulsory that any warehouseman be licensed under the act; on the contrary, it is wholly optional with the warehousemen of the agricultural commodities mentioned in the act whether producers are given an opportunity to avail themselves of its benefits. Such being the case, it is obvious that the problem of the administration of the act is, in the first instance, one of salesmanship, which, in its initial stages, is comparatively expensive.

Employees.	Rate	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.
Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>
Specialist.....	\$3,600.00	1	.....	.....
Specialist.....	2,760.00	.....	.....	1
Specialist.....	1,800.00	1	1	.....
Supervisors (divisional).....	3,000.00	3	.....	.....
Investigator.....	2,700.00	1	1	2
Investigator.....	2,520.00	2	2	.....
Investigator.....	2,400.00	1	1	2
Investigator.....	2,280.00	1	1	.....
Investigator.....	2,160.00	.....	.....	1
Investigator.....	2,000.00	.....	.....	2
Assistant.....	3,000.00	1	1	.....
Assistant.....	2,500.00	.....	.....	2
Assistant.....	2,400.00	1	1	.....
Assistant.....	2,280.00	.....	.....	1
Assistant.....	2,100.00	1	1	1
Assistant.....	1,800.00	1	1	1
Assistant.....	1,500.00	.....	.....	1

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.					Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>Administration of the United States Warehouse Act—Continued.</i>						
Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.		
Salaries—Continued.		Number.	Number.	Number.		
Inspector.....	\$2,400.00	1	1	1		
Inspector.....	2,100.00	6	6	6		
Inspector.....	1,760.00	2	1	1		
Inspector.....	1,500.00	1	1	1		
Clerk.....	1,400.00	1	1	1		
Clerk.....	1,200.00	4	4	2		
Clerk (temporary).....	1,100.00	1	1	1		
Messenger.....	600.00	1	1	1		
		29	12	18		
Salaries.....		\$61,540.00	\$26,780.00	\$23,638.62		
OTHER OBJECTS OF EXPENDITURE						
Stationery.....		2,860.00	2,500.00	2,539.86		
Traveling expenses.....		27,500.00	4,000.00	6,468.83		
Equipment and material.....		3,700.00	500.00	523.83		
Telephone and telegraph service.....		700.00	340.00	299.16		
Miscellaneous items.....		3,700.00	880.00	1,463.98		
Total.....		100,000.00	35,000.00	34,934.28		
<i>Enforcement of the Standard Container Act—</i>						
(92) <i>To enable the Secretary of Agriculture to carry into effect the act entitled "An act to fix standards for Climax baskets for grapes and other fruits and vegetables, and to fix standards for baskets and other containers for small fruits, berries, and vegetables, and for other purposes," approved August 31, 1916, including the employment of such persons and means as the Secretary of Agriculture may deem necessary, in the city of Washington and elsewhere (submitted)</i>					\$4,800.00	
Appropriation for 1918.....	\$4,000	Estimate for 1919.....	\$5,000			
Appropriation for 1919.....	5,000	Estimate for 1920.....	3,800			
Appropriation for 1920.....	3,800	Estimate for 1921.....	4,800			
Appropriation for 1921.....	3,800	Estimate for 1922.....	4,800			
NOTE.—This item is transferred from its present location under "General Expenses, Bureau of Markets." It is a regulatory item and its inclusion among other regulatory provisions is therefore desirable. (See item 86.)						
Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.		
Salaries:		Number.	Number.	Number.		
Investigator (temporary).....per annum..	\$3,000.00	1	1	1		
Assistant.....do.....	1,920.00	1	1	1		
Salaries.....		\$1,920.00	\$1,920.00	\$2,240.00		
OTHER OBJECTS OF EXPENDITURE.						
Traveling expenses.....		2,105.00	1,560.00	918.47		
Equipment and material.....		250.00	125.00	.95		
Miscellaneous items.....		525.00	195.00	165.31		
Total.....		4,800.00	3,800.00	3,324.73		
<i>Completion of Wool Work—</i>						
(93) <i>To enable the Bureau of Markets and Crop Estimates to complete the work of the domestic wool section of the War Industries Board and to enforce the Government regulations for handling the wool clip of 1918 as established by the Wool Division of said board, pursuant to the Executive order dated Dec. 31, 1918, transferring such work to the said bureau (act May 31, 1920, vol. 41, p. 725, sec. 1)</i>					15,000.00	\$15,000.00
NOTE.—There is no change in this item. A continuation of the appropriation is desirable, however, because, from present indications, it probably will be necessary to institute legal proceedings in order to collect approximately \$750,000 of excess profits now in the hands of central						

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.																																																																																																																																																														
<p><i>Completion of Wool Work—Continued.</i></p> <p>dealers. This will probably delay the distribution of these funds until the next fiscal year. There is now being distributed approximately \$350,000.</p> <table><tr><th>Employees.</th><th>Rate.</th><th>Estimated, 1922.</th><th>Appropriated, 1921.</th><th>Expended, 1920.</th></tr><tr><td>Salaries:</td><td></td><td><i>Number.</i></td><td><i>Number.</i></td><td><i>Number.</i></td></tr><tr><td>Specialist.....per annum..</td><td>\$3,720.00</td><td></td><td></td><td>1</td></tr><tr><td>Expert (temporary).....do....</td><td>2,400.00</td><td></td><td></td><td>1</td></tr><tr><td>Investigator (part time).....do....</td><td>2,400.00</td><td></td><td></td><td>1</td></tr><tr><td>Investigator.....do....</td><td>2,280.00</td><td></td><td></td><td>1</td></tr><tr><td>Assistant (temporary).....do....</td><td>2,500.00</td><td></td><td></td><td>1</td></tr><tr><td>Assistant.....do....</td><td>2,040.00</td><td>1</td><td>1</td><td></td></tr><tr><td>Assistant (part time).....do....</td><td>1,800.00</td><td></td><td></td><td>2</td></tr><tr><td>Assistant (part time).....do....</td><td>1,440.00</td><td></td><td></td><td>1</td></tr><tr><td>Auditor (temporary).....do....</td><td>2,400.00</td><td></td><td></td><td>1</td></tr><tr><td>Auditor.....do....</td><td>2,280.00</td><td>1</td><td>1</td><td>1</td></tr><tr><td>Auditor.....do....</td><td>2,040.00</td><td></td><td></td><td>2</td></tr><tr><td>Auditor (temporary).....do....</td><td>2,000.00</td><td></td><td></td><td>1</td></tr><tr><td>Auditor.....do....</td><td>1,980.00</td><td></td><td></td><td>1</td></tr><tr><td>Auditor.....do....</td><td>1,200.00</td><td></td><td></td><td>1</td></tr><tr><td>Clerk (temporary).....do....</td><td>1,260.00</td><td></td><td></td><td>1</td></tr><tr><td>Clerk.....do....</td><td>1,200.00</td><td>1</td><td>1</td><td>4</td></tr><tr><td>Clerk.....do....</td><td>1,100.00</td><td>5</td><td>5</td><td>10</td></tr><tr><td>Clerk.....do....</td><td>1,000.00</td><td>1</td><td>2</td><td>7</td></tr><tr><td>Clerk and messenger (temporary).....do....</td><td>900.00</td><td></td><td></td><td>2</td></tr><tr><td>Machine operators (temporary).....do....</td><td>1,000.00</td><td></td><td></td><td>2</td></tr><tr><td></td><td></td><td>9</td><td>10</td><td>41</td></tr><tr><td>Salaries.....</td><td></td><td>\$9,820.00</td><td>\$10,320.00</td><td>\$29,777.26</td></tr><tr><td colspan="5">OTHER OBJECTS OF EXPENDITURE.</td></tr><tr><td>Stationery.....</td><td></td><td>300.00</td><td>100.00</td><td>44.46</td></tr><tr><td>Traveling expenses.....</td><td></td><td>3,600.00</td><td>3,600.00</td><td>3,897.10</td></tr><tr><td>Equipment and material.....</td><td></td><td>450.00</td><td>450.00</td><td>154.86</td></tr><tr><td>Telephone and telegraph service.....</td><td></td><td>175.00</td><td>175.00</td><td>394.88</td></tr><tr><td>Miscellaneous items.....</td><td></td><td>655.00</td><td>355.00</td><td>335.79</td></tr><tr><td>Total.....</td><td></td><td>15,000.00</td><td>15,000.00</td><td>34,604.35</td></tr></table> <p><i>Statement of clerks employed in District of Columbia under lump-fund appropriations for 30 days or more during the fiscal year ended June 30, 1920 (32 Stat., p. 303).</i></p> <p>GENERAL EXPENSES, BUREAU OF MARKETS AND CROP ESTIMATES.</p> <p>3 clerks, at \$2,000 each per annum. 33 clerks, at \$1,200 each per annum. 2 clerks, at \$1,800 each per annum. 39 clerks, at \$1,100 each per annum. 3 clerks, at \$1,600 each per annum. 1 clerk, \$1,020 per annum. 2 clerks, at \$1,400 each per annum. 22 clerks, at \$1,000 each per annum. 1 clerk, \$1,380 per annum. 2 clerks, at \$900 each per annum.</p> <p>ENFORCEMENT OF THE COTTON-FUTURES ACT.</p> <p>1 clerk, \$2,250 per annum. 2 clerks, at \$1,200 each per annum. 1 clerk, \$2,000 per annum. 1 clerk, \$1,100 per annum. 1 clerk, \$1,400 per annum.</p> <p>ENFORCEMENT OF THE GRAIN STANDARDS ACT.</p> <p>1 clerk, \$1,560 per annum. 21 clerks, at \$1,100 each per annum. 2 clerks, at \$1,400 each per annum. 7 clerks, at \$1,000 each per annum. 1 clerk, \$1,260 per annum. 1 clerk, \$900 per annum. 12 clerks, at \$1,200 each per annum.</p> <p>ADMINISTRATION OF THE WAREHOUSE ACT.</p> <p>1 clerk, \$1,400 per annum. 1 clerk, \$1,100 per annum. 2 clerks, at \$1,200 per annum.</p> <p>SALARIES AND EXPENSES, WOOL DIVISION.</p> <p>1 clerk, \$1,260 per annum. 5 clerks, at \$1,000 each per annum. 4 clerks, at \$1,200 each per annum. 1 clerk, \$900 per annum. 8 clerks, at \$1,100 each per annum.</p> <p>CLASSIFICATION OF COTTON, WHEAT PRICE GUARANTY ACT.</p> <p>2 clerks, at \$1,400 each per annum. 2 clerks, at \$1,100 each per annum. 1 clerk, \$1,200 per annum.</p> <table><tr><td>Total for Bureau of Markets and Crop Estimates.....</td><td>\$4, 219, 142. 00</td><td>\$2, 538, 709. 00</td></tr></table>	Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.	Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>	Specialist.....per annum..	\$3,720.00			1	Expert (temporary).....do....	2,400.00			1	Investigator (part time).....do....	2,400.00			1	Investigator.....do....	2,280.00			1	Assistant (temporary).....do....	2,500.00			1	Assistant.....do....	2,040.00	1	1		Assistant (part time).....do....	1,800.00			2	Assistant (part time).....do....	1,440.00			1	Auditor (temporary).....do....	2,400.00			1	Auditor.....do....	2,280.00	1	1	1	Auditor.....do....	2,040.00			2	Auditor (temporary).....do....	2,000.00			1	Auditor.....do....	1,980.00			1	Auditor.....do....	1,200.00			1	Clerk (temporary).....do....	1,260.00			1	Clerk.....do....	1,200.00	1	1	4	Clerk.....do....	1,100.00	5	5	10	Clerk.....do....	1,000.00	1	2	7	Clerk and messenger (temporary).....do....	900.00			2	Machine operators (temporary).....do....	1,000.00			2			9	10	41	Salaries.....		\$9,820.00	\$10,320.00	\$29,777.26	OTHER OBJECTS OF EXPENDITURE.					Stationery.....		300.00	100.00	44.46	Traveling expenses.....		3,600.00	3,600.00	3,897.10	Equipment and material.....		450.00	450.00	154.86	Telephone and telegraph service.....		175.00	175.00	394.88	Miscellaneous items.....		655.00	355.00	335.79	Total.....		15,000.00	15,000.00	34,604.35	Total for Bureau of Markets and Crop Estimates.....	\$4, 219, 142. 00	\$2, 538, 709. 00		
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Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for current the fiscal year ending June 30, 1921.
ENFORCEMENT OF THE INSECTICIDE ACT.		
<i>Salaries, Enforcement of the Insecticide Act—</i>		
(1) One executive officer (<i>R. S., p. 87, secs. 520-523; acts Apr. 26, 1910, vol. 36, pp. 331-335, secs. 1-14; May 31, 1920, vol. 41, pp. 725-726, sec. 1</i>) -----	\$2, 750. 00	
(2) One executive assistant (<i>same acts</i>) -----	2, 000. 00	
(3) One clerk, class 4 (<i>submitted</i>) -----	1, 800. 00	
NOTE.—This new place is submitted in lieu of 1 clerk, class 3 (item 4) and will provide for the promotion of the employee in charge of the accounting work. He has served the department six years. The salary now received is much lower than that paid for similar work in other bureaus. The position was created in 1913 and the salary fixed then has remained stationary whereas the duties have greatly increased.		
(4) 【One clerk, class 3.】		
NOTE.—See note under item 3.		
(5) Two clerks, class 2 (increase of 1) (<i>R. S., p. 87, secs. 520-523; acts Apr. 26, 1910, vol. 36, pp. 331-335, secs. 1-14; May 31, 1920, vol. 41, pp. 725-726, sec. 1</i>) -----	2, 800. 00	
NOTE.—This new place is submitted in lieu of 1 clerk, class 1 (item 5) and will provide for the promotion of the employee who has charge of the files and records of the chemical laboratories and who is a very capable clerk.		
(6) Three clerks, class 1 (decrease of 1) (<i>same acts</i>) -----	3, 600. 00	
NOTE.—See note under item 5.		
(7) Two clerks, at \$1,140 each (<i>same acts</i>) -----	2, 280. 00	
(8) 【Two clerks, at \$1,000 each.】		
NOTE.—See note under items 10 and 14.		
(9) One insecticide and fungicide inspector (<i>submitted</i>) -----	2, 000. 00	
NOTE.—This new place will provide for the promotion of an inspector now receiving \$1,600 (item 10) who has been in the department nine years and has received no promotion since January 1, 1914. He is required to cover a number of States and performs continuous travel throughout the year. He has an excellent record and thoroughly deserves promotion.		
(10) Four insecticide and fungicide inspectors, at \$1,600 each (increase of 1 by transfer from lump fund) (<i>R. S., p. 87, secs. 520-523; acts Apr. 26, 1910, vol. 36, pp. 331-335, secs. 1-14; May 31, 1920, vol. 41, pp. 725-726, sec. 1</i>) ----	6, 400. 00	
NOTE.—There is apparently no increase in the above item except the transfer of 1 position from the lump fund, but one inspector is promoted to \$2,000, as explained in note under item 9, and a new place is added which offsets this transaction. This new place and that in item 11 are recommended in lieu of 2 clerks and sample collectors, at \$1,000 each (item 12) and 1 clerk, \$1,000 (item 8). This adjustment will involve no increase in funds, and is recommended in the interest of efficiency. It will eliminate the low-salaried positions, which are difficult to fill, and permit the appointment of competent employees by providing adequate salaries.		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>Salaries, Enforcement of the Insecticide Act—Continued.</i>		
(11) One insecticide and fungicide inspector (<i>submitted</i>) ----- \$1, 400. 00		
NOTE.—See note under item 10.		
(12) Two clerks and sample collectors, at \$1,000 each.]		
NOTE.—See note under item 10.		
(13) One sample and storeroom custodian (<i>R. S., p. 87, secs. 520–523; acts Apr. 26, 1910, vol. 36, pp. 331–335, secs. 1–14; May 31, 1920, vol. 41, pp. 725–726, sec. 1</i>) -----	1, 200. 00	
(14) One laboratory helper (<i>submitted</i>) -----	1, 200. 00	
<p>NOTE.—This new place is submitted in lieu of 1 clerk, \$1,000 (item 8), with an increase of \$200. It will provide for the promotion of an employee who has custody of samples of insecticides and fungicides examined in the chemical laboratories and of the chemicals and apparatus used in the work. He also performs miscellaneous duties of a laboratory helper. This employee has served the department very acceptably for 7 years and is worth much more than his present salary. The change of title from clerk is recommended in order to properly indicate the character of the work performed, his duties being strictly those of a laboratory helper and not clerical in any sense.</p>		
(15) One laboratory helper (increase of \$160) (<i>R. S., p. 87, secs. 520–523; acts Apr. 26, 1910, vol. 36, pp. 331–335, secs. 1–14; May 31, 1920, vol. 41, pp. 725–726, sec. 1</i>) -----	1, 000. 00	
<p>NOTE. This promotion is recommended for an exceptionally efficient laboratory helper. He is married, but finds it difficult to maintain his family on the small salary now received. The department can not hope to retain his services unless his compensation is increased.</p>		
(16) One laboratory helper (<i>same acts</i>) -----	720. 00	
(17) One laboratory helper (<i>same acts</i>) -----	600. 00	
(18) One unskilled laborer (increase of \$300 with change of title) (<i>same acts</i>) -----	900. 00	
<p>NOTE.—This increase is recommended in order to provide for the promotion of an employee who has charge of the labor and cleaning force of the Insecticide and Fungicide Board, and who also does considerable repair work. His services have been entirely satisfactory and he fully deserves the promotion recommended. The change of title is recommended in order to afford more latitude in filling the place with either a skilled or unskilled laborer in the event of a vacancy.</p>		
(19) One unskilled laborer (increase of \$360 with change of title) (<i>same acts</i>) -----	840. 00	
<p>NOTE.—This increase is recommended in order to provide for the promotion of an employee who assists in the work at the Vienna, Va., field laboratory of the Insecticide and Fungicide Board. His duties consist of operating a tractor in plowing and cultivating, the application of spray materials, driving an automobile truck, pruning fruit trees, firing furnaces and stoves in greenhouses and office buildings, and other miscellaneous labor. He has been in the service six years, without promotion, and is married. The change of title is recommended in order to afford more flexibility in filling the place with either a skilled or unskilled laborer in the event of a vacancy.</p>		
(20) Two messenger boys, at \$480 each (<i>same acts</i>) -----	960. 00	

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>Salaries, Enforcement of the Insecticide Act—Continued.</i>		
(21) One messenger boy (<i>R. S.</i> , p. 87, secs. 520-523; <i>acts Apr. 26, 1910, vol. 36, pp. 331-335, secs. 1-14; May 31, 1920, vol. 41, pp. 725-726, sec. 1</i>)-----	\$360. 00	
(22) Two charwomen, at \$480 each (<i>same acts</i>)-----	960. 00	
	\$33, 770. 00	\$30, 350. 00
Appropriation for 1917..... \$24,590 | Estimate for 1918..... \$25,990		
Appropriation for 1918..... 25,070 | Estimate for 1919..... 26,750		
Appropriation for 1919..... 26,750 | Estimate for 1920..... 27,950		
Appropriation for 1920..... 29,150 | Estimate for 1921..... 30,350		
Appropriation for 1921..... 30,350 | Estimate for 1922..... 33,770		
NOTE.—Apparent increase, \$3,420; actual increase, \$1,820, as follows:		
<i>Promotions.</i>		
1 laboratory helper, from \$840 to \$1,000..... \$160		
1 unskilled laborer, \$600, to laborer, \$900..... 300		
1 unskilled laborer, \$480, to laborer, \$840..... 360		
	\$820	
<i>New places.</i>		
1 clerk, class 4..... \$1, 800		
1 clerk, class 2..... 1, 400		
1 insecticide and fungicide inspector..... 2, 000		
1 insecticide and fungicide inspector..... 1, 400		
1 laboratory helper..... 1, 200		
	7, 800	
	\$8, 620	
<i>Places dropped.</i>		
1 clerk, class 3..... 1, 600		
1 clerk, class 1..... 1, 200		
2 clerks at \$1,000 each..... 2, 000		
2 clerks and sample collectors, at \$1,000 each..... 2, 000		
	6, 800	
Actual increase.....	1, 820	
<i>Transfer from lump fund for general expenses, which fund has been correspondingly reduced.</i>		
1 insecticide and fungicide inspector.....	1, 600	
Apparent increase.....	3, 420	
<i>Changes of title.</i>		
1 unskilled laborer, \$600, changed to 1 laborer, \$900.		
1 unskilled laborer, \$480, changed to 1 laborer, \$840.		
<i>General Expenses, Enforcement of the Insecticide Act—</i>		
(23) For salaries and the employment of labor in the city of Washington and elsewhere, furniture, supplies, traveling expenses, rent outside of the District of Columbia, and for all necessary expenses, as follows (<i>acts Apr. 26, 1910, vol. 36, pp. 331-335, secs. 1-14; May 31, 1920, vol. 41, p. 726, sec. 1</i>):		
(24) To enable the Secretary of Agriculture to carry into effect the provisions of the act of April 26, 1910, entitled "An act for preventing the manufacture, sale, or transportation of adulterated or misbranded Paris greens, lead arsenates, other insecticides, and also fungicides, and for regulating traffic therein, and for other purposes," [\$117,000] \$150,000 (<i>same acts</i>)-----		
	150, 000. 00	117, 000. 00
Appropriation for 1912..... \$87,000 | Estimates for 1913..... \$100,000		
Appropriation for 1913..... 87,000 | Estimates for 1914..... 100,000		
Appropriation for 1914..... 95,000 | Estimates for 1915..... 95,000		
Appropriation for 1915..... 95,000 | Estimates for 1916..... 107,780		
Appropriation for 1916..... 100,000 | Estimates for 1917..... 85,670		
Appropriation for 1917..... 80,410 | Estimates for 1918..... 87,430		
Appropriation for 1918..... 87,430 | Estimates for 1919..... 94,490		
Appropriation for 1919..... 94,490 | Estimates for 1920..... 94,790		
Appropriation for 1920..... 94,790 | Estimates for 1921..... 111,560		
Appropriation for 1921..... 117,000 | Estimates for 1922..... 150,000		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.					Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Enforcement of the Insecticide Act—Continued.</i>						
<p>NOTE.—There is an apparent increase in the above item of \$33,000, but taking into consideration the transfer of 1 insecticide and fungicide inspector, \$1,600, the actual increase is \$34,600. During the 10 years that the insecticide act has been in operation the insecticide and fungicide industry has increased 600 to 800 per cent, whereas the funds for enforcing the law have increased only about 70 per cent. The recent discovery of calcium arsenate as a remedy for the cotton boll weevil has opened up a large and new field for the use of this insecticide. It is estimated that the shipment to Southern States next year will aggregate 20,000,000 pounds. The extensive campaign now under way by the department to demonstrate the use of calcium arsenate will be ineffective unless this material is closely inspected to see that it is of such standard as to efficiently control the weevil and at the same time not cause serious injury to the cotton plant.</p>						
Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.		
Salaries:		Number.	Number.	Number.		
Chairman..... per annum.	\$4,500.00	1	1	1		
Chairman..... do.	4,260.00					
Scientific assistant..... do.	4,000.00	1	1	1		
Scientific assistant..... do.	3,780.00					
Scientific assistant..... do.	3,240.00	1	1	1		
Scientific assistant..... do.	3,000.00	1	1	1		
Scientific assistant..... do.	2,760.00	1	1	1		
Scientific assistant..... do.	2,750.00					
Scientific assistant..... do.	2,520.00	4	4	3		
Scientific assistant..... do.	2,460.00	1	1			
Scientific assistant..... do.	2,400.00					
Scientific assistant..... do.	2,340.00					
Scientific assistant..... do.	2,280.00	3	2	3		
Scientific assistant..... do.	2,100.00	1	1			
Scientific assistant..... do.	2,040.00	1	1	3		
Scientific assistant..... do.	1,980.00	1	1	1		
Scientific assistant..... do.	1,800.00	3	2			
Scientific assistant..... do.	1,620.00	5	3	3		
Scientific assistant..... do.	1,500.00	2	2	2		
Scientific assistant..... do.	1,440.00	5	4	4		
Scientific assistant..... do.	1,320.00			1		
Assistant..... do.	3,000.00	1	1			
Veterinarian..... do.	2,040.00	1	1			
Inspector..... do.	1,600.00	2	2	1		
Nurseryman..... do.	1,200.00	1	1	1		
Laboratory helper..... do.	1,200.00	1				
Clerks, temporary, \$1,400 to \$1,200..... do.				3		
Field and laboratory assistants, \$900 to \$240..... do.		5	5	5		
Wages:						
Miscellaneous temporary labor, \$6 to \$4..... per diem.		6	5	3		
		48	41	41		
Salaries.....		\$79,500.00	\$70,740.00	\$53,146.16		
Wages.....		540.00	540.00	336.00		
OTHER OBJECTS OF EXPENDITURE.						
Stationery.....		1,000.00	570.00	349.53		
Traveling expenses.....		38,130.00	25,000.00	18,554.05		
Equipment and material.....		17,430.00	10,000.00	9,223.09		
Telephone and telegraph service.....		800.00	450.00	313.52		
Miscellaneous items.....		12,600.00	9,700.00	8,109.86		
Total.....		150,000.00	117,000.00	90,032.21		
Statement of clerks employed in District of Columbia under lump-fund appropriations for 30 days or more during the fiscal year ended June 30, 1920 (32 Stat., p. 303).						
GENERAL EXPENSES, ENFORCEMENT OF THE INSECTICIDE ACT.						
1 clerk, \$1,400 per annum.						
1 clerk, \$1,140 per annum.						
1 clerk, \$1,000 per annum.						
Total for Enforcement of the Insecticide Act.....					\$183,770.00	\$147,350.00

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
FEDERAL HORTICULTURAL BOARD.		
Salaries, Federal Horticultural Board—		
(1) One secretary of board (<i>R. S., p. 87, secs. 520-523; acts Mar. 4, 1913, vol. 37, pp. 853, 854, sec. 1; May 31, 1920, vol. 41, p. 726, sec. 1</i>) -----	\$2, 280. 00	
(2) One assistant (by transfer from lump fund) (<i>same acts</i>) -----	2, 520. 00	
(3) [One executive clerk, \$2,000, combined with grade immediately below at same salary.]		
(4) Two executive clerks, at \$2,000 each (includes the grade immediately above) (<i>same acts</i>) -----	4, 000. 00	
(5) One clerk (by transfer from lump fund) (<i>same acts</i>) -----	2, 000. 00	
(6) One clerk (<i>same acts</i>) -----	1, 980. 00	
(7) Three clerks, class 4 (increase of 2 by transfer from lump fund) (<i>same acts</i>) -----	5, 400. 00	
(8) Two clerks, at \$1,740 each (by transfer from lump fund) (<i>same acts</i>) -----	3, 480. 00	
(9) Two clerks, class 3 (increase of 1 by transfer from lump fund) (<i>same acts</i>) -----	3, 200. 00	
(10) One clerk (<i>same acts</i>) -----	1, 560. 00	
(11) One clerk (by transfer from lump fund) (<i>same acts</i>) -----	1, 500. 00	
(12) Three clerks, at \$1,440 each (<i>same acts</i>) -----	4, 320. 00	
(13) Two clerks, class 2 (<i>same acts</i>) -----	2, 800. 00	
(14) Two clerks, at \$1,260 each (<i>same acts</i>) -----	2, 520. 00	
(15) Fourteen clerks, class 1 (increase of 7 by transfer from lump fund) (<i>same acts</i>) -----	16, 800. 00	
(16) Two messenger boys, at \$600 each (increase of 1 by transfer from lump fund) (<i>same acts</i>) -----	1, 200. 00	
(17) One messenger boy (<i>same acts</i>) -----	480. 00	
(18) Two messenger boys, at \$360 each (<i>same acts</i>) -----	720. 00	
(19) Two charwomen, at \$240 each (increase of 1 by transfer from lump fund) (<i>same acts</i>) -----	480. 00	
	\$57, 240. 00	\$33. 300. 00
Appropriation for 1917..... \$13, 640 Estimate for 1918..... \$20, 500 Appropriation for 1918..... 20, 500 Estimate for 1919..... 26, 500 Appropriation for 1919..... 26, 500 Estimate for 1920..... 31, 300 Appropriation for 1920..... 31, 300 Estimate for 1921..... 41, 050 Appropriation for 1921..... 33, 300 Estimate for 1922..... 57, 240		
NOTE.—Apparent increase, \$23,940; no actual increase, as follows:		
Transfers from lump fund for enforcement of the plant quarantine act, which fund has been correspondingly reduced.		
2 clerks, class 4.....	\$3, 600	
1 clerk.....	1, 740	
1 clerk, class 3.....	1, 600	
1 clerk.....	1, 500	
3 clerks, class 1.....	3, 600	
	\$12, 040	

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
Salaries, Federal Horticultural Board—Continued.		
<i>Transfers from lump fund for eradication of pink bollworm, which fund has been correspondingly reduced.</i>		
1 assistant.....	\$2, 520	
1 clerk.....	2, 000	
1 clerk.....	1, 740	
4 clerks, class 1.....	4, 800	
1 messenger boy.....	600	
1 charwoman.....	240	
	<hr/> \$11, 900	
Apparent increase.....	23, 940	
General Expenses, Federal Horticultural Board—		
(20) For salaries and the employment of labor in the city of Washington and elsewhere, furniture, supplies, traveling expenses, rent outside of the District of Columbia, and for all other necessary expenses, as follows (<i>acts Mar. 4, 1913, vol. 37, pp. 853, 854, sec. 1; May 31, 1920, vol. 41, pp. 726, 727, sec. 1</i>):		
(21) To enable the Secretary of Agriculture to carry into effect the provisions of the act of August 20, 1912, as amended, entitled "An act to regulate the importation of nursery stock and other plants and plant products; to enable the Secretary of Agriculture to establish and maintain quarantine districts for plant diseases and insect pests; to permit and regulate the movement of fruits, plants, and vegetables therefrom, and for other purposes" [\$125,450] (<i>same acts</i>)		
\$163, 410. 00		
Appropriation for 1914.....	\$40, 000	Estimate for 1915..... \$50, 000
Appropriation for 1915.....	50, 000	Estimate for 1916..... 50, 000
Appropriation for 1916.....	50, 000	Estimate for 1917..... 61, 360
Appropriation for 1917.....	61, 360	Estimate for 1918..... 54, 500
Appropriation for 1918.....	104, 500	Estimate for 1919..... 48, 300
Appropriation for 1919.....	48, 300	Estimate for 1920..... 47, 700
Appropriation for 1920.....	47, 700	Estimate for 1921..... 145, 450
Appropriation for 1921.....	125, 450	Estimate for 1922..... 163, 410
NOTE.—There is an apparent increase in the above item of \$37,960, but taking into consideration the transfers to the statutory roll amounting to \$12,040, the actual increase is \$50,000. This amount is requested in order to provide for the rental of suitable quarters for the inspection and disinfection of nursery stock and other plants and seeds entered under permit at the ports of New York and San Francisco, the employment of inspectors and assistants to suitably fumigate, sterilize, and disinfect these articles, and the purchase of necessary equipment. At the present time all nursery stock, plants, and seeds imported under special permits must be forwarded to Washington, D. C., for inspection. In many cases the additional risk of injury resulting from delay in shipment to Washington is found to be a serious burden on importers of new varieties of nursery stock. In order to facilitate the handling of this material it is desirable to have means of examining it immediately at the point of arrival.		
Employees.	Rate.	Estimated, 1922.
		Appropriated, 1921.
		Expended, 1920.
Salaries:		
Inspector.....per annum..	\$3, 500. 00	Number. 1
Inspector.....do.....	3, 000. 00	Number. 2
Inspector.....do.....	2, 520. 00	Number. 1
Inspector.....do.....	2, 460. 00	Number. 1
Inspector.....do.....	2, 400. 00	Number. 3
Inspector.....do.....	2, 250. 00	Number. 1
Inspector.....do.....	2, 220. 00	Number. 1
Inspector.....do.....	2, 160. 00	Number. 1
Inspector.....do.....	2, 040. 00	Number. 4
Inspector.....do.....	2, 000. 00	Number. 1
Inspector.....do.....	1, 800. 00	Number. 4
Inspector.....do.....	1, 740. 00	Number. 10
Inspector.....do.....	1, 620. 00	Number. 2
Inspector.....do.....	1, 600. 00	Number. 1
Field assistants, \$1.800 to \$1,080.....do.....		Number. 6

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
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General Expenses, Federal Horticultural Board—Continued.

Employees.	Rate.	Esti- mated, 1922.	Appro- priated, 1921.	Ex- pended, 1920.
		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>
Salaries—Continued.				
Scientific assistant..... per annum	\$1,440.00	1	1	1
Scientific assistant.....do.	1,200.00			1
Assistant.....do.	3,000.00	1	1	
Assistant.....do.	2,250.00			1
Clerk.....do.	1,800.00		2	2
Clerk.....do.	1,740.00		1	1
Clerk.....do.	1,600.00		1	1
Clerk.....do.	1,500.00	1	1	1
Clerk.....do.	1,200.00		3	3
Collaborators, \$300 to \$1.....do.		86	86	86
Wages:				
Miscellaneous temporary labor, \$4 to \$2.....per diem		6		1
		140	124	130
Salaries.....		\$109,960.00	\$98,780.00	\$39,749.21
Wages.....		3,600.00		19.00
OTHER OBJECTS OF EXPENDITURE.				
Stationery.....		1,000.00	2,000.00	837.90
Traveling expenses.....		18,650.00	18,650.00	3,213.23
Equipment and material.....		12,000.00	1,500.00	870.59
Miscellaneous items.....		18,200.00	4,520.00	2,490.18
Total.....		163,410.00	125,450.00	47,180.11

- (22) To enable the Secretary of Agriculture to meet the emergency caused by the establishment of the potato wart in eastern Pennsylvania, and to provide means for the extermination of this disease in Pennsylvania or elsewhere in the United States, in cooperation with the State or States concerned, including rent outside the District of Columbia, employment of labor in the city of Washington or elsewhere, and all other necessary expenses (*acts Mar. 4, 1913, vol. 37, pp. 853, 854, sec. 1; May 31, 1920, vol. 41, pp. 726, 727, sec. 1.*)..... \$35,300.00

Appropriation for 1920.....	\$50,000	Estimate for 1921.....	\$50,000
Appropriation for 1921.....	35,300	Estimate for 1922.....	35,300

Employees.	Rate.	Esti- mated, 1922.	Appro- priated, 1921.	Ex- pended, 1920.
		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>
Salaries:				
Inspector..... per annum	\$2,400.00			2
Inspector.....do.	2,040.00			1
Inspector.....do.	1,800.00			2
Assistant.....do.	3,000.00			1
Assistant pathologist.....do.	2,280.00	1	1	1
Assistant pathologist.....do.	2,040.00	1	1	1
Assistant pathologist.....do.	1,800.00			2
Assistant pathologist.....do.	1,620.00			1
Assistant pathologist.....do.	1,500.00			1
Assistant pathologist.....do.	1,260.00	1	1	
Assistant pathologist.....do.	1,080.00			1
Field assistant.....do.	2,400.00		1	4
Field assistant.....do.	2,100.00			3
Field assistant.....do.	1,800.00	5	5	25
Field assistant.....do.	1,620.00	2	2	1
Field assistant.....do.	1,500.00	9	8	14
Field assistant.....do.	1,200.00			7
Clerks, temporary, \$1,400 to \$1,100.....do.		1	1	4
Wages:				
Miscellaneous temporary labor, \$4 to \$2.....per diem		15	12	22
		35	32	93
Salaries.....		\$17,000.00	\$17,000.00	\$19,726.15
Wages.....		350.00		671.71
OTHER OBJECTS OF EXPENDITURE.				
Stationery.....		200.00	200.00	147.84
Traveling expenses.....		9,650.00	10,000.00	15,689.59
Equipment and material.....		200.00	200.00	218.11
Miscellaneous items.....		7,900.00	7,900.00	2,294.54
Total.....		35,300.00	35,300.00	38,747.94

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>General Expenses, Federal Horticultural Board—Continued.</i>		
<i>Statement of clerks employed in the District of Columbia under lump-fund appropriations for 30 days or more, during the fiscal year ended June 30, 1920 (32 Stat., p. 303).</i>		
GENERAL EXPENSES, FEDERAL HORTICULTURAL BOARD.		
1 clerk, \$2,250 per annum.	1 clerk, \$1,400 per annum.	
1 clerk, \$1,800 per annum.	2 clerks, at \$1,200 each per annum.	
1 clerk, \$1,740 per annum.	1 clerk, \$1,100 per annum.	
1 clerk, \$1,500 per annum.		
ERADICATION OF PINK BOLLWORM.		
3 clerks, at \$1,800 each per annum.	2 clerks, at \$1,600 each per annum.	
1 clerk, \$1,740 per annum.	5 clerks, at \$1,200 each per annum.	
In all, for general expenses.....	\$198, 710. 00	\$160, 750. 00
Appropriations for 1914..... \$40,000	Estimates for 1915..... \$50,000	
Appropriations for 1915..... 50,000	Estimates for 1916..... 50,000	
Appropriations for 1916..... 50,000	Estimates for 1917..... 61,360	
Appropriations for 1917..... 61,360	Estimates for 1918..... 54,500	
Appropriations for 1918..... 104,500	Estimates for 1919..... 48,300	
Appropriations for 1919..... 48,300	Estimates for 1920..... 47,700	
Appropriations for 1920..... 97,700	Estimates for 1921..... 195,450	
Appropriations for 1921..... 160,750	Estimates for 1922..... 198,710	
(23) [That the plant quarantine act, approved Aug. 20, 1912 (37th Stat., p. 315), be, and is hereby, amended by adding at the end thereof the following section:		
"SEC. 15. That in order further to control and eradicate and to prevent the dissemination of dangerous plant diseases and insect infections and infestations no plant or plant products for or capable of propagation, including nursery stock, hereinafter referred to as plants and plant products, shall be moved or allowed to be moved, shipped, transported, or carried by any means whatever into or out of the District of Columbia, except in compliance with such rules and regulations as shall be prescribed by the Secretary of Agriculture as hereinafter provided. Whenever the Secretary of Agriculture, after investigation, shall determine that any plants and plant products in the District of Columbia are infested or infected with insect pests and diseases and that any place, articles, and substances used or connected therewith are so infested or infected, written notice thereof shall be given by him to the owner or person in possession or control thereof, and such owner or person shall forthwith control or eradicate and prevent the dissemination of such insect pest or disease and shall remove, cut, or destroy such infested and infected plants, plant products, and articles and substances used or connected therewith, which are hereby declared to be nuisances, within the time and in the manner required in said notice or by the rules and regulations of the Secretary of Agriculture. Whenever such owner or person can not be found, or shall fail, neglect, or refuse to comply with the foregoing provisions of this section, the Secretary of Agriculture is hereby authorized and required to control and eradicate and prevent dissemination of such insect pest or disease and to remove, cut, or destroy infested or infected plants and plant products and articles and substances used or connected therewith, and the United States shall have an action of debt against such owner or persons for expenses incurred by the Secretary of Agriculture in that behalf. Employees of the Federal Horticultural Board are hereby authorized and required to inspect places, plants, and plant products and articles and substances used or connected therewith whenever the		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<p>Secretary of Agriculture shall determine that such inspections are necessary for the purposes of this section. For the purpose of carrying out the provisions and requirements of this section and of the rules and regulations of the Secretary of Agriculture made hereunder, and the notices given pursuant thereto, employees of the Federal Horticultural Board shall have power with a warrant to enter into or upon any place and open any bundle, package, or other container of plants or plant products whenever they shall have cause to believe that infections or infestations of plant pests and diseases exist therein or thereon, and when such infections or infestations are found to exist, after notice by the Secretary of Agriculture to the owner or person in possession or control thereof and an opportunity by said owner or person to be heard, to destroy the infected or infested plants or plant products contained therein. The police court or the municipal court of the District of Columbia shall have power, upon information supported by oath or affirmation showing probable cause for believing that there exists in any place, bundle, package, or other container in the District of Columbia any plant or plant product which is infected or infested with plant pests or disease, to issue warrants for the search for and seizure of all such plants and plant products. It shall be the duty of the Secretary of Agriculture, and he is hereby required, from time to time, to make and promulgate such rules and regulations as shall be necessary to carry out the purposes of this section, and any person who shall move or allow to be moved, or shall ship, transport, or carry, by any means whatever, any plant or plant products from or into the District of Columbia, except in compliance with the rules and regulations prescribed under this section, shall be punished, as is provided in section 10 of this act."】</p> <p>NOTE.—The above paragraph, amending the plant quarantine act, is omitted, as it is now permanent legislation.</p>		
Total for Federal Horticultural Board	\$255,950.00	\$194,050.00
<p>And not to exceed 10 per centum of the foregoing amounts for the miscellaneous expenses of the work of any bureau, division, or office herein provided for shall be available interchangeably for expenditures on the objects included within the general expenses of such bureau, division, or office, but no more than 10 per centum shall be added to any one item of appropriation except in cases of extraordinary emergency, and then only upon the written order of the Secretary of Agriculture.</p>		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.		
MISCELLANEOUS.				
Demonstrations on Reclamation Projects—				
(1) To enable the Secretary of Agriculture to encourage and aid in the agricultural development of the Government reclamation projects; to assist, through demonstrations, advice, and in other ways, settlers on the projects: and for the employment of persons and means necessary in the city of Washington and elsewhere, [\$30,000] \$48,600 (<i>acts June 30, 1914, vol. 38, p. 440, sec. 1; May 31, 1920, vol. 41, pp. 727, 728, sec. 1</i>)	\$48,600.00	\$30,000.00		
Appropriation for 1915..... \$40,000	Estimate for 1916..... \$50,000			
Appropriation for 1916..... 40,000	Estimate for 1917..... 40,000			
Appropriation for 1917..... 40,000	Estimate for 1918..... 50,000			
Appropriation for 1918..... 50,000	Estimate for 1919..... 48,600			
Appropriation for 1919..... 48,600	Estimate for 1920..... 48,600			
Appropriation for 1920..... 48,600	Estimate for 1921..... 47,000			
Appropriation for 1921..... 30,000	Estimate for 1922..... 48,600			
NOTE.—The increase of \$18,600 recommended in this item merely restores the appropriation to its 1920 status. As a result of congressional action in reducing the amount of this item, it has been necessary to greatly curtail the work, although requests for its extension on the part of the Reclamation Service and settlers on reclamation projects have been urgent. This demonstration work has greatly aided in establishing a profitable agricultural industry on the reclamation projects, and it is very desirable that it be at least restored to its former basis.				
Employees.	Rate.	Esti- mated, 1922.	Appro- priated, 1921.	Ex- pended, 1920.
Salaries.		Number.	Number.	Number.
Agriculturist in charge.....per annum..	\$3,760.00	1	1	
Agriculturist in charge.....do.....	2,500.00			1
Agriculturist.....do.....	2,460.00			1
Agriculturist.....do.....	2,400.00	3	2	2
Agriculturist.....do.....	2,280.00	3		2
Agriculturist.....do.....	2,250.00			1
Agriculturist.....do.....	2,220.00	2	2	3
Agriculturist.....do.....	2,160.00	1	1	1
Agriculturist.....do.....	1,620.00		1	1
Farm superintendent.....do.....	2,460.00			2
Farm superintendent.....do.....	2,220.00			1
Farm superintendent.....do.....	1,800.00			1
Assistant.....do.....	1,800.00		1	1
Assistant.....do.....	1,320.00	1	1	
Assistant.....per month..	150.00	3		3
Agriculturists, clerks, messengers, and collaborators—				
\$480 to \$1.....per annum..		1	1	2
\$65 to \$15.....per month..		4	4	4
\$7.22.....per diem.....		1		1
\$0.50 to \$0.30.....per hour..		5		5
Wages:				
Miscellaneous temporary labor—				
\$2.17.....per diem.....				2
\$0.35.....per hour.....				4
		25	14	38
Salaries.....		\$27,160.00	\$22,750.00	\$30,497.06
Wages.....				89.61
OTHER OBJECTS OF EXPENDITURE.				
Stationery.....		300.00	200.00	545.47
Traveling expenses.....		13,540.00	6,000.00	7,451.36
Equipment and material.....		4,675.00	500.00	1,815.53
Miscellaneous items.....		2,925.00	550.00	7,454.90
Total.....		48,600.00	30,000.00	47,853.93

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending Jun 30, 1921.																																																																																					
<p>【Fighting and Preventing Forest Fires—】</p> <p>(2) 【For fighting and preventing forest fires, \$250,000, or so much thereof as may be necessary, but not to exceed \$150,000 of this fund shall be expended except in cases of extraordinary emergency; and to enable the Secretary of Agriculture to cooperate with the War Department in the maintenance of an air patrol for fire prevention and suppression on the National Forests of the Pacific coast and the Rocky Mountain regions, \$50,000: <i>Provided</i>, That no part of this appropriation shall be used for the purchase of land or airplanes or for the construction of buildings; in all, \$300,000】</p> <p>NOTE.—This item has been transferred to the Forest Service section of the estimates.</p>		\$300, 000. 00																																																																																					
<p><i>Cooperative Fire Protection of Forested Watersheds of Navigable Streams—</i></p> <p>(3) For cooperation with any State or group of States in the protection from fire of the forested watersheds of navigable streams under the provisions of section 2 of the act of Mar. 1, 1911, entitled “An act to enable any State to cooperate with any other State or States, or with the United States, for the protection of the watersheds of navigable streams, and to appoint a commission for the acquisition of lands for the purpose of conserving the navigability of navigable rivers,” (<i>acts Mar. 1, 1911, vol. 36, p. 961, sec. 1; May 31, 1920, vol. 41, p. 728, sec. 1</i>)</p> <p>NOTE—Further recommendation to be submitted later.</p>	\$125, 000. 00	125, 000. 00																																																																																					
<table><tr><td>Appropriation for 1915.....</td><td>\$100,000</td><td>Estimate for 1916.....</td><td>\$100,000</td></tr><tr><td>Appropriation for 1916.....</td><td>100,000</td><td>Estimate for 1917.....</td><td>100,000</td></tr><tr><td>Appropriation for 1917.....</td><td>100,000</td><td>Estimate for 1918.....</td><td>100,000</td></tr><tr><td>Appropriation for 1919.....</td><td>100,000</td><td>Estimate for 1919.....</td><td>100,000</td></tr><tr><td>Appropriation for 1919.....</td><td>100,000</td><td>Estimate for 1920.....</td><td>100,000</td></tr><tr><td>Appropriation for 1920.....</td><td>100,000</td><td>Estimate for 1921.....</td><td>200,000</td></tr><tr><td>Appropriation for 1921.....</td><td>125,000</td><td>Estimate for 1922.....</td><td>125,000</td></tr></table>	Appropriation for 1915.....	\$100,000	Estimate for 1916.....	\$100,000	Appropriation for 1916.....	100,000	Estimate for 1917.....	100,000	Appropriation for 1917.....	100,000	Estimate for 1918.....	100,000	Appropriation for 1919.....	100,000	Estimate for 1919.....	100,000	Appropriation for 1919.....	100,000	Estimate for 1920.....	100,000	Appropriation for 1920.....	100,000	Estimate for 1921.....	200,000	Appropriation for 1921.....	125,000	Estimate for 1922.....	125,000																																																											
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Appropriation for 1921.....	125,000	Estimate for 1922.....	125,000																																																																																				
<table><tr><th>Employees.</th><th>Rate.</th><th>Esti- mated, 1922.</th><th>Appro- priated, 1921.</th><th>Ex- pended, 1920.</th></tr><tr><td>Salaries:</td><td></td><td><i>Number.</i></td><td><i>Number.</i></td><td><i>Number.</i></td></tr><tr><td>Chief State cooperation.....per annum..</td><td>\$3,000.00</td><td>1</td><td>1</td><td>1</td></tr><tr><td>Examiner.....do.....</td><td>2,800.00</td><td>1</td><td>1</td><td>1</td></tr><tr><td>Examiner.....do.....</td><td>2,500.00</td><td>1</td><td>1</td><td></td></tr><tr><td>Examiner.....do.....</td><td>2,300.00</td><td></td><td></td><td>1</td></tr><tr><td>Collaborator.....do.....</td><td>12.00</td><td>30</td><td>30</td><td>35</td></tr><tr><td>Wages:</td><td></td><td></td><td></td><td></td></tr><tr><td>Patrolmen, guards, and laborers, \$125 to \$75.....per month..</td><td></td><td>290</td><td>290</td><td>285</td></tr><tr><td></td><td></td><td>323</td><td>323</td><td>323</td></tr><tr><td>Salaries.....</td><td></td><td>\$6,200.00</td><td>\$6,200.00</td><td>\$5,500.00</td></tr><tr><td>Wages.....</td><td></td><td>94,200.00</td><td>94,200.00</td><td>90,160.00</td></tr><tr><td colspan="5">OTHER OBJECTS OF EXPENDITURE.</td></tr><tr><td>Traveling expenses.....</td><td></td><td>3,100.00</td><td>3,100.00</td><td>3,100.00</td></tr><tr><td>Equipment and material.....</td><td></td><td>12,600.00</td><td>12,600.00</td><td></td></tr><tr><td>Miscellaneous items.....</td><td></td><td>8,900.00</td><td>8,900.00</td><td>60.00</td></tr><tr><td>Total.....</td><td></td><td>125,000.00</td><td>125,000.00</td><td>98,820.00</td></tr></table>	Employees.	Rate.	Esti- mated, 1922.	Appro- priated, 1921.	Ex- pended, 1920.	Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>	Chief State cooperation.....per annum..	\$3,000.00	1	1	1	Examiner.....do.....	2,800.00	1	1	1	Examiner.....do.....	2,500.00	1	1		Examiner.....do.....	2,300.00			1	Collaborator.....do.....	12.00	30	30	35	Wages:					Patrolmen, guards, and laborers, \$125 to \$75.....per month..		290	290	285			323	323	323	Salaries.....		\$6,200.00	\$6,200.00	\$5,500.00	Wages.....		94,200.00	94,200.00	90,160.00	OTHER OBJECTS OF EXPENDITURE.					Traveling expenses.....		3,100.00	3,100.00	3,100.00	Equipment and material.....		12,600.00	12,600.00		Miscellaneous items.....		8,900.00	8,900.00	60.00	Total.....		125,000.00	125,000.00	98,820.00		
Employees.	Rate.	Esti- mated, 1922.	Appro- priated, 1921.	Ex- pended, 1920.																																																																																			
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Estimates of appropriations required for the service of the fiscal year ending June 30, 1922--Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.		
Northern Pacific Land Grant Reconnaissance—				
(4) For the examination and appraisal of lands within the primary and indemnity limits of the land grant made July 2, 1862 (13 Stat., p. 365), to the Northern Pacific Railroad Co. and of such other lands within the said limits as may be necessary to obtain complete information regarding the equitable basis upon which claim is made by said company of the right to select under the said grant approximately 3,000,000 acres of land now included within national forests of Montana, Idaho, and Washington, and for a report to Congress upon the premises and a recommendation of some practicable plan of adjustment, \$50,000, to be available until expended (submitted)	\$50,000.00			
<p>NOTE.—This is a new item. The Northern Pacific Railroad Co. claims the right to select lands within the indemnity limits along its right of way, notwithstanding the fact that the lands proposed to be selected are within the boundaries of national forests. A brief has been filed in this case which will be considered by the Supreme Court of the United States (No. 325, October Term, 1920), on appeal from the Circuit Court of Appeals for the Ninth District, and will be argued before the court as soon as the Government can get its case ready for presentation. In both of the lower courts the contention of the railroad company has been sustained. If the Supreme Court holds the same view, the railroad company will have the right to select approximately 3,000,000 acres of land throughout the national forests of Montana, Idaho, and Washington. The selection of these national forest lands within the indemnity limits, if made by the company at will, without regard to national needs for Government forest administration, will practically shred a number of national forests and render them not only difficult but in many instances impracticable of administration. The appropriation asked for is to enable the Forest Service to examine the lands within the grant indemnity limits, so that a report can be submitted to Congress on all the equities involved, including some equitable plan of compensating the railroad which will not involve the destruction of the national forests.</p>				
Employees.	Rate.	Estimated, 1922.	Appropriated, 1921. ¹	Expended, 1920. ¹
Salaries:		Number.	Number.	Number.
Examiner.....per annum..	\$2,400.00	1		
Examiner.....do.....	2,100.00	2		
Topographer.....do.....	1,800.00	2		
Assistant.....do.....	1,500.00	3		
Statute clerk.....do.....	1,800.00	1		
Rodmen, transitmen, packers, field assistants, clerks, draftsmen, \$125 to \$75.....per month..		11		
Wages:				
Miscellaneous temporary laborers, \$5 to \$3.....per diem..		18		
		38		
Salaries.....		\$17,000.00		
Wages.....		11,000.00		
OTHER OBJECTS OF EXPENDITURE.				
Traveling expenses.....		3,000.00		
Equipment and material.....		10,000.00		
Miscellaneous items.....		6,000.00		
Total.....		50,000.00		

¹ No appropriations for fiscal years 1920 and 1921.

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.																												
<p><i>Experiments and Demonstrations in Live-Stock Production in the Cane-Sugar and Cotton Districts of the United States.</i></p> <p>(5) To enable the Secretary of Agriculture, in cooperation with the authorities of the States concerned, or with individuals, to make such investigations and demonstrations as may be necessary in connection with the development of live-stock production in the cane-sugar and cotton districts of the United States, including <i>the erection of barns and other necessary buildings, and the employment of persons and means in the city of Washington and elsewhere, [\$46,500] \$67,500: Provided, That of this sum not to exceed \$7,500 may be used for the purchase of road-building material for the construction of roads on the Iberia Live-Stock Experiment Farm, Jeanerette, Louisiana (acts June 30, 1914, vol. 38, p. 441, sec. 1; May 31, 1920, vol. 41, p. 728, sec. 1)</i> -----</p> <table><tr><td>Appropriation for 1915.....</td><td>\$60,000</td><td>Estimate for 1916.....</td><td>\$60,000</td></tr><tr><td>Appropriation for 1916.....</td><td>60,000</td><td>Estimate for 1917.....</td><td>60,000</td></tr><tr><td>Appropriation for 1917.....</td><td>60,000</td><td>Estimate for 1918.....</td><td>60,000</td></tr><tr><td>Appropriation for 1918.....</td><td>60,000</td><td>Estimate for 1919.....</td><td>60,000</td></tr><tr><td>Appropriation for 1919.....</td><td>60,000</td><td>Estimate for 1920.....</td><td>60,000</td></tr><tr><td>Appropriation for 1920.....</td><td>60,000</td><td>Estimate for 1921.....</td><td>60,000</td></tr><tr><td>Appropriation for 1921.....</td><td>46,500</td><td>Estimate for 1922.....</td><td>67,500</td></tr></table> <p>NOTE.—There is an increase in this item of \$21,000. As the appropriation for this work for the current fiscal year was reduced by \$13,500 at the last session of Congress, the amount recommended for the fiscal year 1922 is an actual increase over 1920 funds of only \$7,500. The reduction in the appropriation has made it necessary during the current fiscal year to suspend the construction of a number of buildings absolutely essential to the proper conduct of the live-stock investigations at the Iberia Experiment Farm, Jeanerette, La. If the increase recommended is allowed, this work will be undertaken and \$13,500 used for the purpose. The remainder of the increase, \$7,500, will provide funds for the resurfacing of roadways extending from the farm buildings to two highways passing the station. The resurfacing of these roadways is absolutely necessary as, for considerable periods when the ground is wet, they are practically impassable, particularly for motor trucks. All the road-surfacing material required for this purpose must be shipped in from outside points as there is no local supply available. A proviso has been added to the paragraph authorizing this work and permitting the use of \$7,500 for the purpose.</p> <p>The language of the paragraph has also been amended by the insertion of the words "the erection of barns and other necessary buildings." This language has been included in the paragraph since 1916 until stricken out by Congress at the last session. Under the law, no part of the appropriation can be used for the erection of barns and buildings without specific authority of Congress. It is absolutely essential that provision be made for the construction, from time to time, of buildings and barns required to house animals and equipment if the experimental work is to be continued on a basis that will yield results applicable to actual practice. Employees also must of necessity remain at the station at all times to conduct and supervise the experimental work, care for animals, and be available to meet exigencies that may arise, and suitable but inexpensive living quarters for such employees must be provided and maintained.</p>	Appropriation for 1915.....	\$60,000	Estimate for 1916.....	\$60,000	Appropriation for 1916.....	60,000	Estimate for 1917.....	60,000	Appropriation for 1917.....	60,000	Estimate for 1918.....	60,000	Appropriation for 1918.....	60,000	Estimate for 1919.....	60,000	Appropriation for 1919.....	60,000	Estimate for 1920.....	60,000	Appropriation for 1920.....	60,000	Estimate for 1921.....	60,000	Appropriation for 1921.....	46,500	Estimate for 1922.....	67,500	\$67, 500. 00	\$46, 500. 00
Appropriation for 1915.....	\$60,000	Estimate for 1916.....	\$60,000																											
Appropriation for 1916.....	60,000	Estimate for 1917.....	60,000																											
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Appropriation for 1921.....	46,500	Estimate for 1922.....	67,500																											

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.					Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
Experiments and Demonstrations in Live-Stock Production in the Cane-Sugar and Cotton Districts of the United States—Continued.						
Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.		
Salaries:		Number.	Number.	Number.		
Agent.....per annum.....	\$3,000.00	1				
Agent.....do.....	2,520.00		1	1		
Agronomist.....do.....	2,400.00	1				
Specialist (part time).....do.....	2,100.00			1		
Agent (part time).....do.....	1,740.00			1		
Agent (part time).....do.....	1,700.00			1		
Agent (part time).....do.....	1,500.00			1		
Herdsman.....do.....	1,500.00	2	1	1		
Herdsman.....do.....	1,200.00	1	1	1		
Assistant.....do.....	1,680.00	1	1			
Assistant.....do.....	1,500.00			1		
Clerk.....do.....	1,500.00	1	1	1		
Agent and clerk, \$960 to \$900.....do.....		2	2	2		
Wages:						
Laborer.....per month.....	90.00	1	1	1		
Laborer.....do.....	80.00	1	1	1		
Miscellaneous temporary labor—						
\$55 to \$5.....do.....		5	5	5		
\$3.50 to \$1.25.....per diem.....		54	54	54		
		70	68	72		
Salaries.....		\$14,000.00	\$9,620.00	\$11,863.81		
Wages.....		12,400.00	12,400.00	12,393.25		
OTHER OBJECTS OF EXPENDITURE.						
Traveling expenses.....		500.00	500.00	1,880.40		
Equipment and material.....		1,200.00	5,480.00	4,700.17		
Miscellaneous items.....		18,500.00	18,500.00	28,326.29		
Construction work.....		120,900.00				
Total.....		67,500.00	46,500.00	59,163.92		
¹ This construction work will consist of the following buildings: 1 cottage, 1½-story frame, 43 by 32½ by 18 feet, containing approximately 25,164 cubic feet, at 19.9 cents per cubic foot..... \$5,000.00 6 negro cabins, 1-story frame, 14 by 39 by 10 feet, containing approximately 5,460 cubic feet, at 18.5 cents per cubic foot, with prepared roofing..... 6,000.00 1 lean-to shed, frame, 20 by 134 feet..... 1,200.00 1 extension to roof of beef cattle barn, 12 by 108 feet..... 1,200.00 Gravel driveways—entrance to the farm from public highway and on farm..... 7,500.00						
Experiments in Dairying and Live-Stock Production in Semiarid and Irrigated Districts of the Western United States—						
(6) To enable the Secretary of Agriculture to conduct investigations and experiments in problems connected with the establishment of dairying and meat-production enterprises on the semiarid and irrigated lands of the western United States, including the purchase of live stock, the erection of barns and other necessary buildings, and the employment of necessary persons and means in the city of Washington and elsewhere, [\$40,000] \$50,000 (acts Aug. 11, 1916, vol. 39, p. 491, sec. 1; May 31, 1920, vol. 41, p. 728, sec. 1)					\$50,000.00	\$40,000.00
Appropriation for 1917..... \$40,000 | Estimate for 1918..... \$40,000 Appropriation for 1918..... 40,000 | Estimate for 1919..... 40,000 Appropriation for 1919..... 40,000 | Estimate for 1920..... 40,000 Appropriation for 1920..... 40,000 | Estimate for 1921..... 40,000 Appropriation for 1921..... 40,000 | Estimate for 1922..... 50,000						
NOTE.—There is an apparent increase in this item of \$10,000. However, as it is proposed to transfer to this paragraph the item providing \$10,000 for the establishment of a live-stock department in connection with the Woodward, Okla., field station (see item 18), there is no actual increase over present funds. This consolidation is desirable, as the work at Woodward, Okla., may be conducted under the same supervision as that provided for under this item.						
The language of the paragraph has been amended by the insertion of the words "the erection of barns and other necessary buildings." This provision has been included in the paragraph since 1917, but was stricken out at the last session of Congress. Under the law, no part of the appropriation can be used for the erection of barns and buildings without specific authority of Congress. Such authority is absolutely essential, however, as it is manifestly impossible to undertake live-stock development without suitable barns and sheds to house the animals and equipment used in the work.						

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.					Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>Experiments in Dairying and Live-Stock Production in Semiarid and Irrigated Districts of the Western United States—Continued.</i>						
Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.		
Salaries:		Number.	Number.	Number.		
Husbandman.....per annum..	\$1,620.00	1	1	1		
Husbandman.....do.....	1,380.00	1	1	1		
Assistant.....do.....	1,440.00	1	1	1		
Assistant.....do.....	1,380.00	1	1	1		
Wages:						
Laborer.....do.....	1,140.00	1	1	.....	
Laborer.....do.....	1,020.00	1	1	1		
Laborer.....do.....	100.00	1	1	.....	
Laborer.....do.....	90.00	.....	.....	1		
Miscellaneous temporary labor—						
\$900 to \$840.....do.....		2	2	2		
\$70.....per month.....		1	1	.....	
\$2.80.....per diem.....		2	2	2		
		12	12	10		
Salaries.....		\$5,820.00	\$5,820.00	\$5,820.00		
Wages.....		6,000.00	6,000.00	5,290.01		
OTHER OBJECTS OF EXPENDITURE.						
Traveling expenses.....		1,500.00	1,500.00	1,010.24		
Equipment and material.....		21,580.00	11,580.00	4,140.32		
Telephone and telegraph service.....		100.00	100.00	14.62		
Miscellaneous items.....		15,000.00	15,000.00	9,578.00		
Total.....		50,000.00	49,000.00	25,853.19		
<i>Peat and Muck Land Investigations—</i>						
(7) <i>For experiments and investigations of the agricultural uses of peat and muck lands, including areas partially drained and undrained, independently or in cooperation with States, counties, and municipalities, and for the erection of necessary farm buildings (submitted)</i>					\$50,000.00	.....
NOTE.—This is a new item. It provides for the study of agricultural production on peat and muck lands. This problem, like the one relating to live-stock production in the dry regions of the West, is of tremendous future importance. The areas involved comprise two of the largest units of at present nonutilized land remaining in America. Settlers have often suffered serious losses on account of the lack of any basis by which a true estimate of the worth of these lands can be formed or of methods by which they can be successfully rendered productive. The problem presents two phases; first, the question of ascertaining the actual possibilities of the regions involved, and, second, the publication of the findings, so that legitimate development can be undertaken with assurance of success.						
Employees.	Rate.	Estimated, 1922.	Appropriated, 1921. ¹	Expended, 1920. ¹		
Salaries:		Number.	Number.	Number.		
Agronomist.....per annum..	\$3,000.00	3	.....	.....
Wages:						
Miscellaneous temporary labor,						
\$100.....per month.....		12	.....	.....
		15	.....	.....
Salaries.....		\$9,000.00	.....	.....
Wages.....		9,000.00	.....	.....
OTHER OBJECTS OF EXPENDITURE.						
Traveling expenses.....		1,500.00	.....	.....
Equipment and material.....		9,000.00	.....	.....
Miscellaneous items.....		21,500.00	.....	.....
Total.....		50,000.00	.....	.....
¹ No appropriations for fiscal years 1920 and 1921.						

¹ No appropriations for fiscal years 1920 and 1921.

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<p>(8) That not to exceed [\$60,000] \$125,000 of the lump-sum appropriations herein made for the Department of Agriculture shall be available for the purchase, maintenance, repair, and operation of motor-propelled and horse-drawn passenger-carrying vehicles necessary in the conduct of the field work of the Department of Agriculture outside the District of Columbia: [Provided, That not more than \$10,000 may be used for the eradication of the blowfly and screw worm in live stock and poultry:] <i>Provided, That not to exceed \$25,000 of this amount shall be expended for the purchase of such vehicles, and that such vehicles shall be used only for official service outside the District of Columbia, but this shall not prevent the continued use for official service of motor trucks in the District of Columbia: Provided further, That the Secretary of Agriculture shall, on the first day of each regular session of Congress, make a report to Congress showing the amount expended under the provisions of this paragraph during the preceding fiscal year.</i></p> <p>NOTE.—The above item carries no appropriation. It merely limits the amount that may be expended for purchase, maintenance, repair, and operation of motor-propelled and horse-drawn passenger-carrying vehicles outside the District of Columbia from the various lump-sum appropriations of the department. This limitation has been increased by \$65,000, \$25,000 of which is to cover the purchase of additional vehicles, the remaining \$40,000 being essential, in part, for the maintenance of such new vehicles and to meet the increased cost of maintenance of vehicles now owned by the department. Everything which enters into the maintenance, repair, and operation of vehicles has greatly advanced in cost, and authority for the expenditure of an additional amount is essential. The manner in which this fund will be expended is fully set forth in the table accompanying these estimates.</p> <p>Past experience has demonstrated that the field work of the various activities of the department can be prosecuted efficiently only through the employment of motor-propelled vehicles, and that it is distinctly economical for the department to own its own vehicles. In fact, machines can be purchased outright for the cost of a few weeks' rental at prevailing rates.</p> <p>The language of the paragraph has been amended by the elimination of the proviso relating to the blowfly and screw worm of live stock and poultry. This proviso was included in this item through error in printing the act. A new proviso is inserted authorizing the use of not to exceed \$25,000 of the amount fixed by the paragraph for the purchase of new vehicles. Similar authority had been included in the paragraph since 1915 until stricken out of the present act. The restoration of this authority is essential in order to provide for the replacement of vehicles that it is no longer economical to repair and for the purchase of additional vehicles to obviate further rentals.</p> <p>(9) [That hereafter the Secretary of Agriculture may exchange used parts, accessories, tires, or equipment of motor-propelled and horse-drawn vehicles in part payment for new parts, accessories, tires, or equipment of such vehicles authorized to be purchased by him, to be used for the same purposes as those proposed to be exchanged.]</p> <p>NOTE.—See note under item 10.</p>		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<p>(10) <i>That hereafter the Secretary of Agriculture may exchange motor-propelled and horse-drawn vehicles and used parts, accessories, tires, or equipment thereof, in whole or in part payment for new vehicles or parts, accessories, tires, or equipment of such vehicles, and shall on the first day of each regular session of Congress make a report to Congress for the fiscal year last closed showing each exchange made hereunder.</i></p> <p>NOTE.—This is a new item. The agricultural act for the fiscal year 1917 (39 Stat., 1166) provided authority for the exchange of motor-propelled vehicles in part payment for new vehicles, while the agricultural act for 1921 authorized the exchange of used parts, accessories, tires, and equipment (see item 9). The item which is now submitted is a consolidation of the above provisions, with the elimination of the expression "to be used for the same purposes as those proposed to be exchanged" contained in each provision. It is obvious that in many cases this limitation imposes a severe hardship and prevents exchanges of vehicles which would be highly advantageous. For instance, under present legislation an automobile can not be exchanged for a motor cycle, or vice versa, as a motor cycle can not be used "for the same purpose" as an automobile. Similarly a tire formerly used on an automobile could not be used in exchange for a new motor-cycle tire. Greater latitude in this matter would enable the department to avail itself of the most advantageous exchanges.</p>		

Statement of proposed expenditures for the purchase, maintenance, repair, and operation of motor-propelled and horse-drawn passenger-carrying vehicles in the conduct of the field work of the Department of Agriculture outside of the District of Columbia for the fiscal year ending June 30, 1922, as required by section 5 of the act of July 16, 1914 (38 Stat., 508).

MAINTENANCE, REPAIR, AND OPERATION OF VEHICLES NOW OWNED BY THE DEPARTMENT.

[NOTE.—The amount required for the maintenance, repair, and operation of vehicles to be purchased during the fiscal year ending June 30, 1922, is estimated for below.]

Bureau, division, or office.	Horse-drawn or motor-propelled.	Appropriation.	Number.	Description.	Amount.	Public purpose for which intended.	Officials and employees by whom used.
Weather Bureau....	Motor-propelled.	General expenses, Weather Bureau.	1	Automobile...	\$200	Patrolling and repairing Government telegraph lines.	Official in charge and assistants, Port Angeles, Wash.
Do.	do.	do.	1	Motorcycle...	60	do.	Do.
Bureau of Animal Industry.	do.	Inspection and quarantine.	5	Automobile...	3,500	Travel over ranges for the purpose of inspecting sheep and cattle for scabies and supervising dipping operations.	Inspectors at Monte Vista and Denver, Colo.; Reno, Nev.; Harlem, Mont.; and Aberdeen, S. Dak.
Do.	do.	Eradicating cattle ticks.	9	do.	6,300	Travel to farms, ranges, and dipping vats to inspect cattle and supervise dipping operations.	Inspectors at Jacksonville, Fla.; Atlanta, Ga.; Fort Worth, Tex.; Washington, N. C.; Oklahoma, Okla.; and Little Rock, Ark.
Do.	do.	Eradicating tuberculosis.	6	do.	4,200	Travel from farm to farm in connection with the tuberculin testing of cattle.	Veterinary inspectors in South Dakota, Wisconsin, Missouri, Maine, and Connecticut.
Do.	do.	Eradicating hog cholera.	27	do.	22,000	Investigating hog cholera outbreaks and traveling to farms, local stockyards, and other places, to render assistance to hog owners and others in the control of hog cholera.	Inspectors in charge of stations at Troy, Ala.; Tallahassee, Fla.; Atlanta, Ga.; Springfield, Ill.; Topeka, Kans.; Des Moines, Iowa; Indianapolis, Ind.; College Park, Md.; Lansing, Mich.; Lincoln, Nebr.; Columbus, Ohio; and Madison, Wis.
Do.	do.	Meat inspection.....	2	do.	1,400	Inspection of meats at establishments in Chicago.	Inspector in charge and assistants.
Do.	do.	Animal husbandry.....	1	do.	300	Travel between Government poultry farm (near Glendale, Ariz.) and the town of Glendale to obtain supplies and equipment.	Farm superintendent.
Do.	Horse-drawn....	Dairy industry.....	2	Buggy.....	45	Travel between Government farm (near Beltsville, Md.) and the town of Beltsville to meet trains and obtain mail and supplies.	Farm superintendent and farm employees.
Do.	do.	Animal husbandry.....	1	Omnibus.....	10	do.	Do.
Do.	do.	do.	1	Two-seated brake.	10	do.	Do.
Do.	do.	do.	3	Buggy.....	100	Exercising stallions and travel between Government farm (near Middlebury, Vt.) and the town of Middlebury to obtain mail and supplies.	Superintendent of farm and farm employees.
Do.	do.	do.	1	Surrey.....	30	do.	Do.
Do.	do.	do.	1	Sleigh.....	15	do.	Do.
Do.	do.	do.	1	Cutter.....	15	do.	Do.
Bureau of Plant Industry.	Motor-propelled.	Crop physiology.....	1	Automobile...	300	Travel to cooperative experiments being conducted at Government date gardens at Indio, Mecca, and Palm Springs, Calif.	Bruce Drummond and assistants.
Do.	do.	Crop acclimatization..	1	do.	450	Inspection of experimental plantings of cotton, corn, and other tropical plants being conducted in cooperation with the Indian Office in the vicinity of Sacaton, Ariz.	J. F. Breazeale and assistants.
Do.	do.	Sugar plants.....	4	do.	2,000	Inspecting sugar cane fields in the Southern States to locate sugar-cane diseases and advise growers regarding same.	C. W. Bennett, Lee Bonar, C. P. Sheffield, and L. E. Tisdale.
Do.	do.	Demonstrations on reclamation projects.	3	do.	1,800	Transporting employees engaged in demonstration work on reclamation projects. This work is performed chiefly on individual farms, and its prosecution necessitates frequent visits to individual farmers on all parts of the projects. These projects have no adequate railroad facilities and a large number of farms are remote from railroads.	Agriculturists in charge on North Platte, Umatilla, and Yuma reclamation projects.
Do.	do.	Dry land agriculture..	2	do.	800	Inspection of cooperative shelter-belt work in Montana, North Dakota, South Dakota, and Wyoming.	Employees of the Mandan, N. Dak., field station.
Do.	do.	Forest pathology.....	1	Motor cycle...	60	Investigating forest-tree diseases in the vicinity of Madison, Wis.	Paul V. Siggers and assistant.
Do.	do.	do.	1	do.	60	Investigating forest-tree diseases in the vicinity of Providence, R. I.	J. F. Collins.
Do.	do.	Sugar plants.....	1	Motor cycle with sidecar.	200	Travel to various sugar-beet fields in California for the purpose of studying the curly-top disease of beets.	Eubanks Carsner and C. F. Stahl.
Do.	do.	Arlington Farm.....	1	Motor cycle...	150	Patrol duty on the Arlington Farm, and transporting supervisors between experimental plots.	Watchmen and supervisors.
Do.	Horse-drawn....	Cereal investigations..	1	Buggy.....	75	Transporting employees between the Crowley, La., experiment station and the town of Crowley, and conducting investigational work in the surrounding country.	J. M. Jenkins.
Do.	do.	Dry land agriculture..	5	do.	75	Official travel between department field stations and near-by towns, and conducting inspection work in the vicinity of the stations.	Superintendent and assistants at Scottsbluff, Nebr.; Woodward, Okla.; Akron, Colo.; Ardmore, S. Dak.; and Lawton, Okla., field stations.
Do.	do.	do.	1	Surrey.....	15	Official travel in the vicinity of the Mandan, N. Dak., field station to inspect cooperative shelter-belt work being conducted.	Superintendent and assistants at Mandan, N. Dak., field station.
Do.	do.	Western irrigation agriculture.	8	Buggy.....	120	Travel between department experiment farms at San Antonio, Yuma, Newlands, Belle Fourche, and Huntley, and adjacent towns to obtain supplies and equipment. The stations are located at distances varying from 1 to 7 miles from the nearest town, and conveyances are essential to the proper conduct of the work.	Officials in charge of stations.
Do.	do.	do.	1	Road cart.....	5	Travel between the department experiment farm near Newlands, Nev., and the town of Newlands to obtain necessary supplies and equipment.	Superintendent and assistants at Newlands, Nev., experiment farm.
Do.	do.	Arlington Farm.....	2	Runabout.....	400	Superintending the various field operations being conducted on the Arlington Farm. The farm contains approximately 400 acres and vehicles are essential to the proper supervision of the work.	E. C. Butterfield and assistants.

Statement of proposed expenditures for the purchase, maintenance, repair, and operation of motor-propelled and horse-drawn passenger-carrying vehicles in the conduct of the field work of the Department of Agriculture outside of the District of Columbia for the fiscal year ending June 30, 1922, as required by section 5 of the act of July 16, 1914 (38 Stat., 508)—Continued.

MAINTENANCE, REPAIR, AND OPERATION OF VEHICLES NOW OWNED BY THE DEPARTMENT—Continued.

Bureau, division, or office.	Horse-drawn or motor-propelled.	Appropriation.	Number.	Description.	Amount.	Public purpose for which intended.	Officials and employees by whom used.
Bureau of Plant Industry.	Horse-drawn....	Arlington Farm	1	Top-buggy....	\$100	Superintending various field operations being conducted on the Arlington Farm. The farm contains approximately 400 acres, and vehicles are essential to the proper supervision of the work. This vehicle is used only in inclement weather.	E. C. Butterfield and assistants.
Forest Service.....	Motor-propelled.	General expenses, Forest Service.	7	Automobile....	2,500	Forest-fire protection, and inspection, improvement, land classification and entry survey work on National Forests in California; forest-fire protection and administration on the Angeles and Coeur d'Alene National Forests; and forest-fire protection, administration, inspection, and research work on the Jornada Range Reserve.	Forest officers engaged in land classification, forest-fire protection, improvement, and grazing research work.
Do.....	do.....	do.....	10	Motor cycle....	940	Forest-fire protection on the Pend Oreille, Coeur d'Alene, Beaverhead, Shoshone, Datil, Lincoln, Wasatch, Cascade, and Oregon National Forests.	Rangers, guards, and patrolmen.
Do.....	do.....	do.....	2	Motor wheel..	60	Forest-fire protection on the Colville National Forest.	Do.
Do.....	do.....	do.....	38	Railroad speeder.	3,000	Forest-fire protection on the Cabinet, Lolo, Kootenai, Jefferson, Flathead, Coeur d'Alene, Blackfoot, Pend Oreille, Medicine Bow, Superior, Coconino, Sitgreaves, Tusayan, Targhee, Weiser, Lassen, Shasta, Sierra, Cascade, Olympic, Siskiyou, Snoqualmie, Chugach, Pisgah, Arkansas, and Shenandoah National Forests.	Do.
Bureau of Chemistry.	do.....	Citrus by-products....	1	Automobile....	500	Transporting investigators, samples, supplies, and equipment between Los Angeles laboratory and citrus groves in the State of California.	E. M. Chace, in charge, and assistants.
Do.....	do.....	Food and drugs act....	2	do.....	1,000	Travel to various docks in New York City to collect samples of foods and drugs from shipments intended for import into this country; making inspections of factories and collecting samples of domestic foods and drugs in New York City, Newark, N. J., Brooklyn, N. Y., and contiguous territory, and transporting supplies used in special investigations.	W. R. M. Wharton, in charge, and assistants.
Do.....	do.....	Color investigations...	1	Motor cycle with side car.	125	Emergency travel between laboratory at Arlington farm, near Rosslyn, Va., and the bureau in Washington to obtain special scientific equipment and supplies, receiving and delivering mail, and for the purpose of immediate consultation with bureau officials in connection with investigational work under way.	C. O. Johns, in charge, and assistants.
Bureau of Entomology.	do.....	Preventing spread of moths.	7	Automobile....	4,075	Supervising and directing laboratory, scouting, quarantine, and silvicultural work; colonizing parasites, and making immediate inspections of perishable nursery stock upon telegraphic or telephonic requests at nurseries located in infested area.	The principal assistants in charge of the investigations, scientific assistants, foremen and scouts acting under their supervision and direction.
Do.....	do.....	Cereal and forage insects.	1	do.....	400	Investigations of cereal and forage insects at West Lafayette, Ind.	W. H. Larrimer.
Do.....	do.....	Deciduous fruit insects	1	do.....	400	Conducting investigations of the Japanese beetle in the vicinity of Riverton, N. J.	C. H. Hadley.
Do.....	do.....	Tropical and subtropical fruit insects.	1	do.....	400	Tropical and subtropical fruit insect investigations at Miami, Fla.	G. F. Mozzette.
Do.....	do.....	Truck crop insects.	1	do.....	400	Conducting sweet-potato weevil campaign in Florida.	B. L. Boyden.
Do.....	do.....	Deciduous fruit insects	1	do.....	400	Pecan insect investigations in the vicinity of Monticello, Fla.	J. B. Gill.
Do.....	do.....	Cereal and forage insects.	1	do.....	400	Inspection and investigational work near Wichita, Kans.	J. R. Horton.
Do.....	do.....	Southern field crop insects.	1	do.....	400	Inspecting experimental work being carried on at points in and around Clarksville, Tenn., and conducting investigational work in that vicinity.	A. C. Morgan.
Do.....	do.....	do.....	1	do.....	400	Inspecting experimental operations at various plantations in the vicinity of Tallulah, La.	B. R. Coad.
Do.....	do.....	Miscellaneous insects..	1	do.....	400	Investigations in the vicinity of Dallas, Tex., of insects affecting the health of man and animals.	F. C. Bishopp.
Do.....	do.....	do.....	1	Motor cycle....	100	do.....	Iscar Pool.
Do.....	do.....	Truck crop insects....	1	do.....	100	Conducting sugar-beet insect investigations in California, with special reference to the curly-top leaf hopper.	C. F. Stahl.
Do.....	do.....	do.....	1	do.....	100	Inspection of experimental and demonstration fields in the vicinity of Kingsville, Tex., in connection with the control of the sweet-potato weevil.	F. A. Johnston.
Do.....	do.....	do.....	1	do.....	100	Inspection of experimental fields near Alhambra, Calif., undergoing treatment against potato and other truck crop insects.	R. E. Campbell.
Do.....	do.....	do.....	1	do.....	100	Investigational work in the vicinity of Bowling Green, Ohio, and for transferring men and equipment between various fields where experiments are in progress.	N. F. Howard.
Do.....	do.....	Deciduous fruit insects	1	do.....	100	Apple-insect investigations in the vicinity of Medford, Oreg.	M. A. Yothers.
Do.....	do.....	Cereal and forage insects.	1	do.....	100	Inspection work in the vicinity of Knoxville, Tenn.	G. G. Ainslie.
Do.....	do.....	do.....	1	do.....	100	Conducting alfalfa-insect investigations in the vicinity of Sacramento, Calif.	C. M. Packard.
Do.....	do.....	Mediterranean fruit fly.	1	do.....	150	Conducting investigations of the Mediterranean fruit fly at Honolulu, T. H.	H. F. Willard.
Do.....	do.....	Preventing spread of moths.	1	do.....	175	Collecting insects, parasitized material, and food plants to be used in experimental work, determining spread of parasites and natural enemies in the field, scouting new territory, and directing operations of field parties engaged in scouting and extermination work.	The principal assistants in charge of the investigations; scientific assistants, foremen, and scouts acting under their supervision and direction.
Do.....	do.....	Deciduous fruit insects	1	do.....	100	Apple-insect investigations in the vicinity of Yakima, Wash.	E. J. Newcomer.
Do.....	do.....	Truck-crop insects....	1	do.....	100	Conducting investigations of truck-crop insects at Greeley, Colo.	E. A. Mallory.

Statement of proposed expenditures for the purchase, maintenance, repair, and operation of motor-propelled and horse-drawn passenger-carrying vehicles in the conduct of the field work of the Department of Agriculture outside of the District of Columbia for the fiscal year ending June 30, 1922, as required by section 5 of the act of July 16, 1914 (38 Stat., 508)—Continued.

MAINTENANCE, REPAIR, AND OPERATION OF VEHICLES NOW OWNED BY THE DEPARTMENT—Continued.

Bureau, division, or office.	Horse-drawn or motor-propelled.	Appropriation.	Number.	Description.	Amount.	Public purpose for which intended.	Officials and employees by whom used.
Bureau of Biological Survey.	Motor-propelled.	Maintenance of mammal and bird reservations.	1	Motor cycle...	\$300	Patrolling Malheur Lake bird reservation, Oregon.	Warden in charge.
Bureau of Public Roads.	.....do.....	Road building and maintenance.	1	Automobile...	600	Personal supervision of maintenance work in progress, demanding the close and more or less continuous presence of a representative of the bureau. The length of the maintenance projects makes it impossible to inspect the work expeditiously by any other means.	Highway engineers supervising maintenance work.
Do.....	.....do.....	Farm irrigation.....	2	.....d.o.....	1,200	Personal supervision of irrigation projects, demanding the close and more or less continuous presence of a representative of the bureau. These machines are used only where it is impracticable for engineers to inspect the work expeditiously by any other means.	Irrigation engineers supervising irrigation projects.
Do.....	.....do.....	Road materials.....	2	.....do.....	1,400	Personal supervision and inspection of experimental roads in the vicinity of Washington, D. C., and field tests in connection with concrete and soil pressure investigations.	Chemists and testing engineers supervising experimental work.
Do.....	.....do.....	.....do.....	1	.....do.....	700	Personal supervision and inspection of construction work and transporting employees between the bureau in Washington and the Arlington experimental farm, where work is being conducted.	Highway engineers supervising construction work and employees assigned to laboratory at the Arlington farm.
Bureau of Markets.	.....do.....	Market news service...	6	.....do.....	2,700	Travel between railroad yards, markets, stockyards, packing houses, and feeding stations in Chicago, Detroit, Omaha, Philadelphia, and Kansas City, which can not conveniently be reached by street cars, to obtain reports of arrivals, price quotations, and similar information regarding fruits, vegetables, live stock, and meats.	Employees in charge and assistants.
Do.....	.....do.....	Market inspection of perishable foods.	1	.....do.....	450	Transporting inspectors and equipment, supplies, etc., between inspection points in Cleveland.	Food products inspectors.
Do.....	.....do.....	Enforcement of the United States grain-standards act.	3	.....do.....	1,350	Transporting grain samplers, supervisors, and others, and grain samples between Federal grain supervision offices and railroad yards, wharves, and grain elevators where samples are obtained.	Federal grain supervisors and assistants.
Federal Horticultural Board.	.....do.....	Suppressing spread of pink bollworm of cotton.	11	.....do.....	7,700	Survey and research work in connection with the eradication of the pink bollworm of cotton, and for transporting employees to and from infested fields and other points inaccessible by other means of transportation.	Plant quarantine inspectors and assistants.
Total.....	.....do.....	.....do.....	.....do.....	.....do.....	78,320	.....do.....	.....do.....

TO BE PURCHASED DURING THE FISCAL YEAR 1922.

Bureau, division, or office.	Horse drawn or motor propelled.	Appropriation.	For purchase.						Net cost.	For main- te- nance, repair, and oper- ation.	Public purpose for which intended.	Officials and em- ployees by whom used.
			New vehicles.			Vehicles to be exchanged.						
			Num- ber.	Description.	Gross cost.	Num- ber.	Description.	Allow- ance (esti- mated).				
Bureau of Animal Industry.	Motor propelled	Inspection and quarantine.	7	Automobile...	\$3,365	1	Automobile..	\$150	\$3,215	\$4,900	Travel on ranges to inspect sheep and cattle for scabies and supervise dipping operations.	Inspectors at Ros- well, N. Mex., Ogden, Utah, Walla Walla, Wash., Rapid City, S. Dak., Great Falls, Mont., and Twin Falls, Idaho.
Do.....	do.....	Eradicating cattle ticks.	10	do.....	5,000				5,000	6,500	Travel to farms, ranges, and dipping vats to in- spect cattle and super- vise dipping operations.	Inspectors at Wash- ington, N. C., Jacksonville, Fla., Atlanta, Ga., Little Rock, Ark., Fort Worth, Tex., and Baton Rouge, La.
Bureau of Plant Industry.	do.....	Cotton and truck dis- eases.	1	do.....	510				510	250	Travel between Greeley, Colo., experiment sta- tion and the town of Greeley, a distance of about 2½ miles; inspec- tion of potato fields in the vicinity of Greeley, and visiting potato stor- age houses during the winter months in con- nection with the storage- rot investigations being conducted.	H. G. MacMillan and assistants.
Do.....	do.....	do.....	1	do.....	510				510	300	Conducting potato-disease investigations in the vi- cinity of the Presque Isle, Me., field station, and performing daily travel between the labo- ratory and experimental farm, a distance of 3 miles.	E. S. Schultz and assistants.

Statement of proposed expenditures for the purchase, maintenance, repair, and operation of motor-propelled and horse-drawn passenger-carrying vehicles in the conduct of the field work of the Department of Agriculture outside of the District of Columbia for the fiscal year ending June 30, 1922, as required by section 5 of the act of July 16, 1914 (38 Stat., 508)—Continued.

TO BE PURCHASED DURING THE FISCAL YEAR 1922—Continued.

Bureau, division, or office.	Horse drawn or motor propelled.	Appropriation.	For purchase.						Net cost.	For main- tenance, repair, and operation.	Public purpose for which intended.	Officials and em- ployees by whom used.
			New vehicles.			Vehicles to be exchanged.						
			Num- ber.	Description.	Gross cost.	Num- ber.	Description.	Allow- ance (esti- mated).				
Bureau of Plant Industry.	Motor propelled.	Sugar plants..	4	Automobile...	\$2,040				\$2,040	\$2,000	Travel to various sugar- cane fields in the South- ern States to locate sugar- cane diseases and advise growers regarding same.	C. W. Bennett, Lee Bonar, C. P. Sheffield, Lee Tisdale, and as- sistants.
Do.....	do.....	Demonstra- tions on re- clamation projects.	5	do.....	2,550	5	Automobile..	\$250	2,300	2,500	Transporting employees engaged in demonstra- tion work on reclama- tion projects. This work is performed chiefly on individual farms and its prosecution necessitates frequent visits to indi- vidual farmers on all parts of the projects. These projects have no adequate railroad facili- ties and a large number of farms are remote from railroads.	Agriculturists in charge of the Huntley, Sho- shone, Minidoka, Uncompahgre, and Belle Fourche recla- mation projects.
Forest Service.....	do.....	General ex- penses, For- est Service.	1	Motor wheel..	75				75	30	Fire patrol on the Colville National Forest. Needed to operate a speeder now used as a hand car on account of long hauls and heavy loads.	Forest rangers and patrolmen
Do.....	do.....	do.....	8	Railroad speeder.	4,150				4,150	800	Forest-fire protection on the Coeur d'Alene, Deer- lodge, Kaniksu, Coconi- no, Sitgreaves, Cascade, Olympic, and Chugach National Forests.	Do.
Bureau of Ento- mology.	do.....	Deciduous fruit insects.	1	Automobile...	531				531	300	Travel to peach orchards scattered over a large area in order to make necessary spray applica- tions, observations, etc., in connection with the control of the plum cur- culio.	O. I. Snapp.
Bureau of Markets..	do.....	Market news service.	4	do.....	2,400				2,400	1,600	Travel between numerous and widely scattered railroad yards, markets, stockyards, packing houses, and feeding sta- tions in Denver, Los Angeles, Salt Lake City, and San Francisco to obtain market informa- tion.	Employees in charge and assist- ants.
Federal Horticul- tural Board.	do.....	Suppressing spread of pink boll- worm of cot- ton.	5	do.....	3,000				3,000	2,500	Survey and research work in connection with the eradication of the pink bollworm of cotton, and transporting employees to and from infested fields and other points inaccessible by other means of transportation.	Plant quarantine inspectors and assistants.
Total.....									23,731	21,680		

SUMMARY.

Bureau, division, or office.	Motor-propelled vehicles.			Horse-drawn vehicles.			Totals.		
	For purchase.	For maintenance, repair, and operation.	Total.	For purchase.	For maintenance, repair, and operation.	Total.	For purchase.	For maintenance, repair, and operation.	For bureau, division, or office.
Weather Bureau.....		\$260	\$260					\$260	\$260
Bureau of Animal Industry.....	\$8,215	49,100	57,315		\$225	\$225	\$8,215	49,325	57,540
Bureau of Plant Industry.....	5,360	10,870	16,230		790	790	5,360	11,660	17,020
Forest Service.....	4,225	7,330	11,555				4,225	7,330	11,555
Bureau of Chemistry.....		1,625	1,625					1,625	1,625
Bureau of Entomology.....	531	9,300	9,831				531	9,300	9,831
Bureau of Biological Survey.....		300	300					300	300
Bureau of Public Roads.....		3,900	3,900					3,900	3,900
Bureau of Markets.....	2,400	6,100	8,500				2,400	6,100	8,500
Federal Horticultural Board.....	3,000	10,200	13,200				3,000	10,200	13,200
Total.....	23,731	98,985	122,716		1,015	1,015	23,731	100,000	123,731

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>Eradication of Foot-and- Mouth and Other Contagious Diseases of Animals—</i>		
(11) In case of an emergency arising out of the existence of foot-and-mouth disease, rinderpest, contagious pleuropneumonia, or other contagious or infectious disease of animals which, in the opinion of the Secretary of Agriculture, threatens the live-stock industry of the country, he may expend in the city of Washington or elsewhere, out of any money in the Treasury not otherwise appropriated, the sum of ["\$50,000"] <i>\$1,000,000</i> , which sum is hereby appropriated, or so much thereof as he determines to be necessary, in the arrest and eradication of any such disease, including the payment of claims growing out of past and future purchases and destruction, in cooperation with the States, of animals affected by or exposed to, or of materials contaminated by or exposed to, any such disease, wherever found and irrespective of ownership, under like or substantially similar circumstances, when such owner has complied with all lawful quarantine regulations: <i>Provided</i> , That the payment for animals hereafter purchased may be made on appraisement based on the meat, dairy, or breeding value, but in case of appraisement based on breeding value no appraisement of any animal shall exceed three times its meat or dairy value, and except in case of an extraordinary emergency, to be determined by the Secretary of Agriculture, the payment by the United States Government for any animal shall not exceed one-half of any such appraisements: <i>Provided further</i> , That so much of the appropriation of \$2,500,000 made by the Agricultural appropriation act of Mar. 4, 1915, for the fiscal year ending June 30, 1916, for the arrest and eradication of foot-and-mouth disease, rinderpest, contagious pleuropneumonia, or other contagious or infectious disease of animals, as remains unexpended at the close of the fiscal year [1920] <i>1921</i> , is hereby reappropriated and made available for expenditure during the fiscal year ending June 30, [1921] <i>1922</i> , for the objects mentioned in said appropriation act, including necessary investigations to determine whether said diseases have been completely eradicated in districts where they previously existed (<i>acts Mar. 4, 1915, vol. 38, p. 1115, sec. 1; May 31, 1920, vol. 41, pp. 728, 729, sec. 1</i>) -----	\$1, 000, 000. 00	\$50, 000. 00
Deficiency for 1915..... \$2,500,000 Appropriation for 1916..... 2,500,000 Appropriation for 1917..... 1,250,000 Appropriation for 1918..... 1,000,000 Appropriation for 1919..... 1,000,000 Appropriation for 1920..... 1,000,000 Appropriation for 1921..... 50,000	Estimate for 1917..... \$2,500,000 Estimate for 1918..... 1,250,000 Estimate for 1919..... 1,000,000 Estimate for 1920..... 1,000,000 Estimate for 1921..... 1,000,000 Estimate for 1922..... 1,000,000	
<p>NOTE.—There is an increase in this item of \$950,000, which restores the appropriation to the amount that has been provided for the purpose since 1918. It should be pointed out that this appropriation of \$1,000,000 is merely an insurance fund, and no part of it will be expended except in case of an actual outbreak of foot-and-mouth or other contagious disease of animals. It is imperative, when such diseases appear, that prompt measures be taken for their suppression. During previous outbreaks of the foot-and-mouth disease which occurred when Congress was not in session to provide promptly adequate funds for their suppression, the work has been seriously retarded and the danger of spread of the disease considerably increased. Irreparable losses might occur to the live-stock industry of the country if adequate funds to meet such emergencies are not available.</p> <p>The language of the paragraph has been slightly amended so as to make available during the fiscal year 1922 any balance of the \$2,500,000 appropriation provided for this purpose in the Agricultural appropriation act for 1916.</p>		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.																				
<p><i>Eradication of Pink Bollworm—</i></p> <p>(12) To enable the Secretary of Agriculture to meet the emergency caused by the existence of the pink bollworm of cotton in Mexico, and to prevent the establishment of such insect in the United States by the employment of all means necessary, including rent outside of the District of Columbia and the employment of persons and means in the city of Washington and elsewhere, [\$488,560] \$666,660, as follows (<i>act May 31, 1920, vol. 41, pp. 729, 730, sec. 1</i>):</p> <table><tr><td>Appropriation for 1917.....</td><td>\$50,000</td><td>Estimate for 1918.....</td><td>\$250,000</td></tr><tr><td>Appropriation for 1918.....</td><td>250,000</td><td>Estimate for 1919.....</td><td>500,000</td></tr><tr><td>Appropriation for 1919.....</td><td>500,000</td><td>Estimate for 1920.....</td><td>595,800</td></tr><tr><td>Appropriation for 1920.....</td><td>595,800</td><td>Estimate for 1921.....</td><td>388,560</td></tr><tr><td>Appropriation for 1921.....</td><td>488,560</td><td>Estimate for 1922.....</td><td>666,660</td></tr></table> <p>NOTE.—There is an apparent increase in the appropriation for the eradication of pink bollworm of cotton of \$178,100, but, taking into consideration transfers to the statutory roll of the Federal Horticultural Board aggregating \$11,900, the actual increase is \$190,000, which it is proposed to expend as follows:</p> <p>(a) \$15,000 for cooperation with the Mexican authorities in the extermination of local infestations of the pink bollworm in Mexico near the border of the United States. An appropriation for work of this character was included in the urgent deficiency bill approved Oct. 6, 1917, making the initial appropriation for pink bollworm control work in the United States and Mexico, and has been subsequently carried in the Agricultural appropriation acts for 1919, 1920, and 1921. The amount specifically set aside for this purpose in 1919 and 1920 was \$25,000. In the department's estimates for 1921, this amount was reduced to \$10,000, inasmuch as up to that time there had been little opportunity for cooperation with Mexico and only a small portion of the money appropriated had been actually expended. The altered political situation in Mexico now makes it possible to take up an active program of control of local infestations in Mexico near the border, in cooperation with the Mexican Federal and State authorities. The appropriation requested this year is therefore merely a return in part to the appropriation made in 1919 and 1920 for this purpose. The cleaning up of points of infestation near the border is one of the most effective means of preventing further entry of the pink bollworm into the United States and a small expenditure in work of this kind will obviate the necessity of vastly greater expenditures in clean-up work in Texas or other States which must necessarily result if such local infestations are not cared for.</p> <p>(b) \$175,000 to enable the department to properly carry out its eradication work against the pink bollworm in Texas and Louisiana. An appropriation of \$400,000 was made for this work for each of the fiscal years 1919 and 1920. This item in the department's estimates for 1921 was reduced to \$225,000 under the belief that the work of extermination of the pink bollworm was well advanced and that very little extensive cleaning of fields would be necessary for that fiscal year. This item was still further reduced (to \$125,000) in the bill as presented to the House by the Committee on Agriculture. The discovery, early in 1920, of the presence of the pink bollworm in Louisiana and its further spread in Texas, however, led to a request on Congress to increase this appropriation by \$300,000, \$200,000 of which increase was granted. The current work indicates the need of an increase of \$175,000 over the amount appropriated for 1921 to fully cover the cost entailed by enlargement of the invaded territory determined this fall and by the increased labor cost. The States of Louisiana and Texas have made appropriations of \$250,000 and \$100,000, respectively, to cooperate with the Federal Government in this work, and all these funds will be urgently needed to carry forward the work planned for the fiscal year 1922.</p> <p>(13) To prevent the movement of cotton and cotton seed from Mexico into the United States, including the regulation of the entry into the United States of railway cars and other vehicles, and freight, express, baggage, or other materials from Mexico, and the inspection, cleaning, and disinfection thereof, [\$148,560] \$139,840; any moneys received in payment of charges fixed by the Secretary of Agriculture on account of such cleaning and disinfection at plants constructed therefor out of any appropriation made on account of the pink bollworm of cotton to be covered into the Treasury as miscellaneous receipts (<i>same acts</i>)..... \$139,840.00</p> <p>NOTE.—See note under item 12.</p>	Appropriation for 1917.....	\$50,000	Estimate for 1918.....	\$250,000	Appropriation for 1918.....	250,000	Estimate for 1919.....	500,000	Appropriation for 1919.....	500,000	Estimate for 1920.....	595,800	Appropriation for 1920.....	595,800	Estimate for 1921.....	388,560	Appropriation for 1921.....	488,560	Estimate for 1922.....	666,660		
Appropriation for 1917.....	\$50,000	Estimate for 1918.....	\$250,000																			
Appropriation for 1918.....	250,000	Estimate for 1919.....	500,000																			
Appropriation for 1919.....	500,000	Estimate for 1920.....	595,800																			
Appropriation for 1920.....	595,800	Estimate for 1921.....	388,560																			
Appropriation for 1921.....	488,560	Estimate for 1922.....	666,660																			

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>Eradication of Pink Bollworm—Continued.</i>		
(14) To make surveys to determine the actual distribution of the pink bollworm in Mexico and to exterminate local infestations in Mexico near the border of the United States, in cooperation with the Mexican Government or local Mexican authorities [\$10,000] (<i>act May 31, 1920, vol. 41, pp. 729, 730, sec. 1</i>)	\$25, 000. 00	
NOTE.—See note under item 12.		
(15) To investigate in Mexico or elsewhere the pink bollworm as a basis for control measures (<i>same acts</i>)	5, 000. 00	
NOTE.—See note under item 12.		
(16) To conduct surveys and inspections in Texas or in any other State to detect any infestation and to conduct such control measures, including the establishment of cotton-free areas, in cooperation with the State of Texas or other States concerned, as may be necessary to stamp out such infestation, to establish in cooperation with the States concerned a zone or zones free from cotton culture on or near the border of any State or States adjacent to Mexico, and to cooperate with the Mexican Government or local Mexican authorities, or otherwise, by undertaking in Mexico such measures for the extermination of the pink bollworm of cotton as shall be determined to be practicable from surveys showing its distribution, [\$325,000] \$496,820, of which amount \$200,000 shall be immediately available: <i>Provided</i> , That no part of the money herein appropriated shall be used to pay the cost or value of crops or other property injured or destroyed (<i>same acts</i>)	496, 820. 00	
NOTE.—See note under item 12.	\$666, 660. 00	\$488, 560. 00

PINK BOLLWORM BORDER INSPECTION *

Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.
Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>
Entomologist in charge..per annum	\$3, 500. 00	1	1	
Chief inspector.....do.....	3, 000. 00			1
Inspector.....do.....	2, 880. 00	1	1	
Inspector.....do.....	2, 460. 00	1	1	
Inspector.....do.....	2, 280. 00			1
Inspector.....do.....	2, 220. 00	3	3	1
Inspector.....do.....	2, 040. 00	6	6	4
Inspector.....do.....	2, 000. 00			2
Inspector.....do.....	1, 800. 00	5	2	9
Inspector.....do.....	1, 740. 00	10	9	12
Inspector.....do.....	1, 680. 00			1
Inspector.....do.....	1, 500. 00			1
Scientific assistant.....do.....	2, 040. 00			1
Scientific assistant.....do.....	2, 000. 00	1	1	1
Scientific assistant.....do.....	1, 680. 00			1
Clerks, temporary, \$1,740 to \$1,200.....do.....			2	2
Charwoman.....do.....	240. 00		1	1
Wages:				
Mechanics.....do.....	1, 740. 00	2	2	2
Miscellaneous temporary labor, \$4 to \$2.....per diem..		20	16	15
		50	45	55
Salaries.....		\$49, 800. 00	\$57, 220. 00	\$32, 146. 28
Wages.....		5, 480. 00	3, 480. 00	10, 151. 00
OTHER OBJECTS OF EXPENDITURE.				
Stationery.....		1, 500. 00	1, 200. 00	773. 23
Traveling expenses.....		12, 000. 00	10, 000. 00	7, 022. 95
Equipment and material.....		63, 360. 00	36, 866. 70	717. 93
Miscellaneous items.....		3, 700. 00	3, 700. 00	46, 515. 61
Construction work.....		1 4, 000. 00	2 36, 093. 30	3 10, 400. 40
Total.....		139, 840. 00	148, 560. 00	107, 727. 40

¹ This construction work will consist of the following building:
Addition to fumigation house at Eagle Pass, Tex., 180 by 12 by 16½, containing approximately 35,640 cubic feet, at an estimated cost of 10½ cents per cubic foot..... \$4,000.00

² This construction work is to consist of the following buildings:
1 temporary storage shed at El Paso, Tex., 45 by 17 by 17, containing 13,005 cubic feet, at approximately 20½ cents per cubic foot..... 2,620.00
1 temporary fumigating house at Nogales, Ariz., 460 by 24½ by 16½, containing approximately 200,720 cubic feet, at 10½ cents per cubic foot. . 33,453.30

³ This construction work consisted of the following building:
1 temporary fumigating house at El Paso, Tex., 230 by 39½ by 16½, containing approximately 150,546 cubic feet, at 10½ cents per cubic foot, \$26,452.00; amount paid on work to Aug. 31, 1920..... 10,400.40

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.					Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>Eradication of Pink Bollworm—Continued.</i>						
PINK BOLLWORM COOPERATION IN MEXICO.						
Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.		
Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>		
Inspector.....per annum..	\$2,160.00	1	1	.....	
Inspector.....do.....	2,040.00	.....	.....	1		
Inspector.....do.....	1,400.00	6	.....	.....
Inspector.....do.....	1,200.00	.....	.....	1		
Wages:						
Temporary labor.....per diem..	2.00	20	.....	1		
		27	1	3		
Salaries.....		\$10,560.00	\$2,160.00	\$2,400.00		
Wages.....		800.00	.....	1.00		
OTHER OBJECTS OF EXPENDITURE.						
Traveling expenses.....		8,000.00	3,000.00	2,251.42		
Equipment and material.....		1,100.00	500.00	78.61		
Miscellaneous items.....		4,540.00	4,340.00	187.58		
Total.....		25,000.00	10,000.00	4,918.61		
PINK BOLLWORM RESEARCH INVESTIGATIONS.						
Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.		
Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>		
Scientific assistant.....per annum..	\$1,920.00	1	1	1		
Scientific assistant.....do.....	1,740.00	.....	.....	1		
Inspector.....do.....	1,720.00	1	1	1		
Inspector.....do.....	1,680.00	.....	.....	1		
Inspector.....do.....	1,600.00	.....	.....	2		
Inspector.....do.....	1,500.00	.....	.....	3		
Inspector.....do.....	1,400.00	.....	.....	11		
Inspector.....do.....	1,200.00	.....	.....	1		
Wages:						
Miscellaneous temporary labor, \$4 to \$2.....per diem..		.....	.....	51		
		2	2	72		
Salaries.....		\$3,620.00	\$3,620.00	\$15,435.92		
Wages.....		.....	.....	447.65		
OTHER OBJECTS OF EXPENDITURE.						
Traveling expenses.....		986.00	980.00	7,508.41		
Equipment and material.....		200.00	200.00	2.27		
Miscellaneous items.....		200.00	200.00	1,251.43		
Total.....		5,000.00	5,000.00	24,645.68		
PINK BOLLWORM ERADICATION.						
Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.		
Salaries:		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>		
Inspector.....per annum..	\$2,500.00	1	1	.....	
Inspector.....do.....	2,460.00	1	1	1		
Inspector.....do.....	2,000.00	1	1	1		
Inspector.....do.....	1,920.00	1	1	1		
Inspectors.....do.....	1,800.00	4	4	3		
Inspectors.....do.....	1,740.00	3	3	1		
Inspector.....do.....	1,680.00	1	1	1		
Inspectors.....do.....	1,600.00	2	2	1		
Inspectors.....do.....	1,500.00	2	2	9		
Inspectors.....do.....	1,400.00	43	25	28		
Inspectors.....do.....	1,380.00	2	2	.....	
Inspectors.....do.....	1,200.00	5	5	21		
Inspectors.....do.....	1,020.00	21	11	.....	
Scientific assistant.....do.....	2,820.00	1	1	.....	
Scientific assistants.....do.....	1,600.00	.....	.....	2		
Scientific assistant.....do.....	1,560.00	.....	.....	1		
Scientific assistants.....do.....	1,400.00	.....	1	4		
Scientific assistants.....do.....	1,200.00	.....	.....	2		
Assistant.....do.....	2,520.00	1	1	.....	
Assistant.....do.....	2,340.00	.....	.....	1		
Clerks, temporary, \$2,000 to \$1,200.....do.....		.....	7	9		
Inspector, messenger and mes- senger boys, \$900 to \$600.....do.....		1	1	10		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.					Total amount to be appropriated under each head of appropriation.	Amount appropriated for the fiscal year ending June 30, 1921.
Eradication of Pink Bollworm—Continued						
PINK BOLLWORM ERADICATION—continued.						
Employees.	Rate.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.		
Wages:		Number.	Number.	Number.		
Miscellaneous temporary laborers, \$4 to \$2..... per diem.....		7,074	4,716	4,716		
		7,164	4,786	4,812		
Salaries.....		\$91,820.00	\$63,260.00	\$82,286.56		
Wages.....		212,500.00	115,000.00	141,758.44		
OTHER OBJECTS OF EXPENDITURE.						
Stationery.....		3,000.00	2,000.00	1,643.12		
Traveling expenses.....		154,000.00	110,000.00	133,403.66		
Equipment and material.....		5,500.00	4,000.00	3,534.29		
Miscellaneous items.....		30,000.00	30,740.00	20,153.95		
Construction work.....				1 451.00		
Total.....		496,820.00	325,000.00	383,231.02		
¹ This construction work consisted of the following building: 1 temporary storage house on department grounds at Washington, D. C., 14 by 20 by 8, containing 2,040 cubic feet at 22.4 cents per cubic foot..... \$500.00.						
【Prevention of Spread of European Corn Borer—】						
(17) 【To enable the Secretary of Agriculture to meet the emergency caused by the spread of the European corn borer, and to provide means for the control and prevention of spread of this insect throughout the United States, in cooperation with the States concerned, including employment of persons and means in the city of Washington and elsewhere, and all other necessary expenses, \$400,000, of which \$250,000 shall be immediately available】.....						\$400, 000. 00
NOTE.—This item has been transferred to the Bureau of Entomology section of the estimates.						
【Field Station, Woodward, Oklahoma—】						
(18) 【For the establishment in connection with the Woodward, Okla., field station, of a live-stock department, through which experiments and demonstrations in live-stock breeding, growing and feeding, including both beef and dairy animals, may be made, \$10,000】.....						10, 000. 00
NOTE.—See note under item 6.						
【Short-Time Rural Credits Committee—】						
(19) 【There is hereby constituted a joint committee of the Senate and House of Representatives, to consist of the chairman of the Senate Committee on Agriculture and Forestry, the chairman of the House Committee on Agriculture, and the chairmen of the Committees on Banking and Currency of the two Houses, and two other members of each of said committees, to be designated by the chairmen of the respective committees, and it shall be the duty of said joint committee to investigate and report at as early a date as may be possible as to the practicability of establishing a system of short-time rural credits in the United States and to recommend such legislation as may be deemed practicable and desirable to that end. The said committee is hereby authorized to hold meetings either during or between sessions.】						

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<p>[Short-Time Rural Credits Committee]—Continued.</p>		
<p>[The sum of \$5,000 is hereby appropriated, the same to be immediately available, out of any funds in the Treasury not otherwise appropriated, to defray all necessary expenses of said joint committee, payment of said expenses to be made upon vouchers approved by the chairman of said joint committee, who shall be selected by the committee.] -----</p>		\$5, 000. 00
<p>NOTE.—This item is omitted. It provides for the investigation by a congressional committee of the practicability of establishing a system of short-time rural credits in the United States. The item was inserted in the act by the Senate Committee on Agriculture, and it is presumed that the Congress will take such action in regard thereto as it may deem necessary and desirable.</p>		
<p>(20) Whenever, during the fiscal year ending June 30, [1921] 1922, the Secretary of Agriculture shall find that the expenses of travel can be reduced thereby, he may, in lieu of actual traveling expenses, under such regulations as he may prescribe, authorize the payment of not to exceed [3] 4 cents per mile for a motor cycle or [7] 12 cents per mile for an automobile, used for necessary travel on official business.</p>		
<p>NOTE.—The present maximum mileage rates allowed by law for the use of personally owned motor cycles and automobiles for travel on official business of the department are 3 cents and 7 cents, respectively. The records of the department indicate that the cost of operating Government-owned automobiles varies from 7 to 12 cents per mile for light cars and from 8 to 16 cents per mile for heavier cars. These variations in the rates are due almost entirely to local factors, such as the difference in the cost of supplies in the various sections of the country and road conditions in the locality where the car is being used. Many of the employees of the department feel unable to pay from their personal funds the difference between the established rates and the actual cost of operation, and, for this reason, a number have disposed of their cars, while others are not inclined to continue to use their vehicles in official work. Unless this condition is remedied, the field work of the department will be greatly impeded. The increase proposed in the maximum mileage rates to 12 cents for an automobile and 4 cents for a motor cycle will make it possible to more nearly meet the actual cost of operation. Within these limitations, the Secretary of Agriculture, under the authority granted by this paragraph, will fix the rates to suit individual cases, which, of course, in many instances will be considerably lower than the maximum suggested.</p>		
<p>(21) [The Secretary of Agriculture is authorized to acquire by gift, devise, or by purchase in fee simple for a sum not to exceed \$1 for each site, the sites now occupied by field stations at Chico, Calif., consisting of about 80 acres and used for propagating, testing, and distributing new plant introductions; the site at Bellingham, Wash., consisting of about 60 acres and used as a bulb station and for propagating, testing, and distributing new crop plants; and the sites at Buena Vista, Fla., and Savannah, Ga., consisting of about 25 acres and about 46 acres, respectively, and used for propagating, testing, and distributing new crop plants peculiarly adapted to the warmer parts of the United States.]</p>		
<p>NOTE.—It is proposed to omit the above item as title to all the sites mentioned will be acquired by the Government during the current fiscal year.</p>		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.								
<p>(22) [That a yield of 5 bushels or less per acre of wheat on lands owned by those in the drought-stricken regions who borrowed money from the Government of the United States for the purchase of wheat for seed be, and the same is hereby, declared to be a failure, and the borrower whose yield was 5 bushels or less per acre be, and he is hereby, released from repayment of the amount borrowed by him from the Government: <i>Provided</i>, That nothing herein shall release the borrower who signed a guaranty fund agreement and whose crop was not a failure, from making the contribution provided for in such agreement, but said guaranty fund shall be used as stipulated in the agreement to the settlement of the loans to those whose crop was a failure.]</p> <p>NOTE.—This item appears to be permanent legislation and should therefore be omitted.</p> <p><i>Construction of Vault for Refrigerating Plant—</i></p> <p>(23) <i>For the construction of a vault for the housing, and the transfer to and the installation therein, of the machinery and apparatus of the refrigerating plant of the Bureau of Animal Industry (submitted)</i>-----</p> <p>NOTE.—This is a new item. At the present time the refrigerating plant of the Bureau of Animal Industry is located in the subbasement of Laboratory A, commonly known as the east wing, of the new Agriculture Building. This location is below ground and at a point where the drainage from the building collects. Consequently, the machinery space is at all times damp, resulting in repeated breakdowns in the electrical auxiliaries. In fact, it has never been possible to use the automatic electric-control features of the plant on account of the excessive dampness. There are some 12 or 15 cold rooms depending upon the plant for maintaining low temperatures, and the quantity of perishable material stored therein is large and valuable. Much of this material, which has taken weeks to prepare, has been injured and some actually lost through the failure of the electrical equipment. The entire installation is very unsatisfactory from the standpoint of good refrigeration service. Moreover, the present location is entirely too small to adequately accommodate the apparatus. For these reasons it is recommended that provision be made for the construction of a suitable vault to house this plant, to be located underground in close proximity to the east end of Laboratory A. Plans and specifications have already been prepared for such a vault, the cost of which is estimated at \$25,000. Under existing law, as interpreted by the Comptroller of the Treasury, the construction of this plant can not be undertaken without specific statutory authority.</p>	\$25,000.00									
<table><tr><th>Other objects of expenditure.</th><th>Estimated, 1922.</th><th>Appropriated, 1921.</th><th>Expended, 1920.</th></tr><tr><td>Construction work.....</td><td>¹ \$25,000.00</td><td>No appropriation.</td><td>No appropriation.</td></tr></table>	Other objects of expenditure.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.	Construction work.....	¹ \$25,000.00	No appropriation.	No appropriation.		
Other objects of expenditure.	Estimated, 1922.	Appropriated, 1921.	Expended, 1920.							
Construction work.....	¹ \$25,000.00	No appropriation.	No appropriation.							
<p>¹ This construction work consists of the following building: 1 refrigerating vault, concrete construction, 46 by 80 feet, containing approximately 37,000 cubic feet, at 67 cents, estimated cost, \$25,000.</p>										

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the fiscal year ending June 30, 1921.
(24) <i>Officers and employees of the Department of Agriculture during the fiscal year ending June 30, 1922, while traveling on official business away from their designated posts of duty may be allowed not to exceed \$7 per day for subsistence, but in no case shall they be reimbursed any sum in excess of expenses actually incurred by them.</i>		
<p>NOTE.—This item and item 25 provide increases in the maximum allowances that may be made to employees traveling on official business (a) in lieu of subsistence and (b) for actual traveling expenses, the former from \$4 to \$6 per diem and the latter from \$5 to \$7 per diem. The present rates were fixed by the act of Apr. 6, 1914 (urgent deficiency act, fiscal year 1914), and the act of Aug. 1, 1914 (sundry civil appropriation act for the fiscal year 1915), and they were fairly adequate at the time. The constantly increasing cost of subsistence, however, during the past three or four years has seriously altered the situation and makes it imperative that the rates be advanced in order to meet present conditions. This is especially true in reference to subsistence in the larger cities. When the existing rates were established, and for a time thereafter, a room with bath in a first-class hotel could be secured for from \$2 to \$2.50 per day. Now \$4 or \$5 per day must be paid for the same accommodations in the larger cities. The price of meals also has advanced at least 50 per cent—in many cases 100 per cent. Not infrequently it occurs that the cost of lodging and subsistence in the larger cities ranges from \$7.50 to \$9 or \$10 a day. While some hotels may, and frequently do, advertise rooms with running water or with private bath for \$2 or \$3, travelers almost invariably find upon arrival that no rooms at these prices are available. The smaller, older, and cheaper hotels which advertise rooms at \$2 and \$2.50 seldom seem to have any vacant rooms at these rates when an attempt is made to secure them. It is now practically impossible to find such accommodations in New York, Boston, Philadelphia, Chicago, or Kansas City at less than \$3.50 and frequently \$4. In the circumstances, the officers of the department who are required to travel on official business have had to pay out of their personal funds expenditures in excess of the maximum allowances. This is a distinct injustice to them, and the situation not only is a source of dissatisfaction on the part of the employees, but it also increases the difficulty of securing and retaining qualified men in the service.</p>		
(25) <i>The Secretary of Agriculture during the fiscal year ending June 30, 1922, is authorized to prescribe per diem rates of allowance not exceeding \$6 in lieu of subsistence to officers or employees of the Department of Agriculture engaged in field work or traveling on official business outside of the District of Columbia away from their designated posts of duty.</i>		
NOTE.—See note under item 24.		
(26) <i>Hereafter, officials and employees of the Department of Agriculture when traveling on official business and authorized by the Secretary of Agriculture to receive per diem allowances in lieu of subsistence under authority of the act of Congress of Aug. 1, 1914 (38 Stat., p. 609), may be reimbursed, in addition, for moneys expended for street car and other fares, under similar circumstances as employees receiving reimbursement for expenses actually incurred, which fares shall in no case be construed as subsistence expenses: Provided, That reimbursement shall be made only on account of moneys expended for street car or other fares in proceeding to and from the transaction of official business.</i>		
<p>NOTE.—This provision is submitted with a view to overcome a hardship imposed upon the traveling force of the department through the interpretation by the Comptroller of the Treasury of the act of Aug. 1, 1914, authorizing the granting of per diem allowances in lieu of subsistence. The comptroller has held, in effect, that employees receiving a per diem allowance in lieu of subsistence can not properly be reimbursed for street car and other fares expended in traveling between place of lodging, or where meals are taken, and place where duty is performed. A striking example of the apparent inequity of the situation occurred during the war when some 60 employees of the Bureau of Animal Industry</p>		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the fiscal year ending June 30, 1921.
<p>were detailed to inspect meats at the various Army cantonments throughout the country. Military regulations prohibited these employees from remaining at the cantonments over night and they necessarily lodged at the nearest town where accommodations could be secured, which required that they travel to and from the cantonment each day. In cases where the nearest town was several miles from the cantonment and street cars were not available, special transportation had to be resorted to, and the amounts expended therefor by each of the 60 employees averaged approximately \$12 a month for a period of about nine months. Under the decisions of the comptroller, the employees could not properly be reimbursed for these expenditures, as they were held to be a "subsistence" expense and therefore covered by the per diem allowance.</p> <p>A somewhat similar situation exists with reference to practically every employee of the department traveling on official business and receiving a per diem allowance in lieu of subsistence. In many cases, duty must necessarily be performed at points in the country or in the suburbs of a city, not infrequently several miles from the only place where sleeping accommodations are obtainable; but it is impossible, under present conditions, to reimburse employees for amounts expended by them in proceeding to and from such duty. In cities it is not possible to reimburse employees for street car fares expended in proceeding from the place where lodging is secured, or where a meal is taken, to the place where official duty must be transacted, and vice versa.</p> <p>Under present living conditions, it is practically impossible for the traveling force to keep their subsistence expenses within the maximum amounts for which they may claim reimbursement, and to require them to pay from their personal funds expenses necessarily incurred in transacting the public business imposes an additional hardship which is not believed to be justified.</p> <p>(27) <i>Hereafter, if any employee of the Department of Agriculture assigned to permanent duty in Alaska, Hawaii, Porto Rico, Guam, and the Virgin Islands shall elect to postpone taking any or all of the annual leave to which he may be entitled, he may, in the discretion of the Secretary of Agriculture, subject to the interests of the public service, be allowed to take at one time in any calendar year unused annual leave which may have accumulated within not to exceed four calendar years immediately preceding and be paid at the rates prevailing during the year such leave has accumulated.</i></p> <p>NOTE.—This is a new item. The Agricultural appropriation act for the fiscal year 1920 contained an identical provision, except that it limited the privilege of accumulative leave to employees of the agricultural experiment stations in Alaska, Hawaii, Porto Rico, Guam, and the Virgin Islands. Inasmuch as employees of other branches of the department, including the Weather Bureau, the Bureau of Chemistry, and the Forest Service, are assigned for permanent duty in these insular possessions, it seems only equitable to extend the privilege to them also. This provision, if enacted, will accomplish that result.</p>		
<p><i>Emergency Control of Unexpected Insect Outbreaks—</i></p> <p>(28) <i>That there is hereby appropriated, out of any money in the Treasury of the United States not otherwise appropriated, the sum of \$100,000, which shall be available for expenditure by the Secretary of Agriculture, in the city of Washington or elsewhere, for the immediate emergency control of unexpected insect outbreaks which, in his opinion, are dangerous to agriculture, and this fund shall be available until expended (submitted) -----</i></p> <p>NOTE.—This is a new item. Almost every year the department receives urgent requests for assistance from various States to meet sudden and serious outbreaks of injurious insects which, if immediate control measures are not taken, may cause damage running into the millions of dollars. As a rule, no funds are available to meet these demands; or if so, only in an inadequate way. In order to get such situations in hand when they arise and check further spread of serious insect infestations, it is imperative that ample funds be immediately available to inaugurate an intensive control campaign. It is therefore desirable that a special fund for this purpose be available to meet situations which can not be</p>	\$100,000.00	-----

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<i>Emergency Control of Unexpected Insect Outbreaks—Continued.</i>		
<p>forecasted and which experience has shown are almost sure to develop in some section of the country each year. The Bureau of Entomology, with its annual appropriations, makes intensive studies of insects known to be injurious and beneficial to agriculture, and through its field stations in various parts of the country keeps in close touch with insect pests. Through the agency of these field stations and cooperation with State and other entomologists the bureau quickly learns of insect outbreaks, and with adequate funds available could at once institute thoroughgoing repressive measures.</p> <p>If this appropriation is provided it is believed that an enormous saving to growing crops can be effected. If emergency funds had been available during the past season, for example, the department could have assisted materially in the control of the grasshopper outbreak in North and South Dakota and eastern Montana between June 15 and Aug. 1 of this year, which resulted in very heavy losses to cereal and forage crops in this large territory. The department would also have been able to make an immediate survey of the Mexican bean weevil, which has just become established in several counties in central Alabama, where it has reduced the table bean and cowpea crops by at least 50 per cent. Indeed, many of the present serious insect pests of this country could probably have been materially held in check if adequate funds for control had been available at the time of their discovery. It is certain that insect outbreaks will occur in the future, and it would be decidedly the part of wisdom and economy to provide the department with funds for immediately inaugurating control measures.</p> <p>This being an emergency appropriation, it is impracticable to submit the detailed estimate of expenditures required by section 10 of the sundry civil act of Aug. 1, 1914.</p> <p>(29) <i>That not to exceed \$2,500 in all from the lump-sum appropriations provided by this act may be used for the purchase, for official use, of reprints of articles contributed by the various branches of the department to scientific, technical, and trade journals.</i></p> <p>This is a new item. It carries no appropriation, but merely authorizes the use of not exceeding \$2,500 of the lump-sum appropriations of the department for the purchase of reprints of articles contributed to scientific, technical, and trade journals by the various bureaus of the department.</p> <p>Many of the results of scientific investigations of the department are published in scientific, technical, and trade journals, since the majority of the people directly interested in them can be better and more economically reached through such journals than in any other way. To have these articles printed as bulletins and circulars of the department would result in a considerable drain on the printing fund of the department, and it is doubtful whether they could be distributed as effectively to interested persons as through the columns of outside publications. Oftentimes, however, copies of the reprinted articles are needed for use in correspondence, since many inquiries can be answered more completely and economically by simply sending a copy of the reprinted article. It is unsatisfactory to refer a correspondent to a publication to which he may not have access. It is estimated that the total cost for the purchase of these reprints will not exceed \$2,500 per annum. The saving to the bureaus in conducting correspondence alone will be many times this sum.</p> <p>The journals usually give the contributing author a few reprints of the published article, but these are not sufficient to meet the needs of the various bureaus. In many instances these reprints are sent by the author to scientists who are interested in the subject matter of the article, and usually none are left for use in answering miscellaneous inquiries from the general public.</p>		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
<p>(30) <i>That hereafter the maximum salary of any scientific investigator, or other employee engaged in scientific work and paid from the general appropriations of the Department of Agriculture, shall not exceed at the rate of \$6,500 per annum.</i></p> <p>NOTE.—There has been no change in the maximum amount that may be paid to scientific and technical employees on lump-fund rolls since 1914, notwithstanding the great change in economic conditions that has taken place during the past six years. The present limitation (\$4,500) is entirely too low and the increase suggested is absolutely essential if the department is to continue to render effective service. Some of the most fundamental and difficult problems in the field of agriculture lie ahead of us. The planning and execution of experiments and investigations for the solution of these problems, and the development of the necessary machinery for conducting vigorous campaigns to eliminate the pests and diseases which are handicapping production in every section of the country, depend for their success upon the employment and retention of the highest type of scientific and administrative officers.</p> <p>Highly trained and experienced specialists and administrators are leaving the service daily for salaries two, three, four, and even five times as much as the department is able to pay them, although many of them are practically indispensable because they can not be replaced at anything like the compensation that can be offered to them under the existing limitation, which applies only to the Department of Agriculture. The department has a record of the salaries received in outside employment by 528 of the scientific and technical employees who resigned during the fiscal year 1920. This record shows that 383 of these employees are receiving compensation from other public institutions and commercial concerns ranging from \$500 to \$7,000 more than they were paid by the department, representing an average increase of from \$1,200 to \$1,500 per annum.</p> <p>The turnover in personnel has been abnormal during the past two or three years and has now reached an alarming stage. The situation is critical and something should be done to enable the department to retain a sufficient number of competent men and women to carry on effectively the important work intrusted to it by Congress. It is not to be hoped, of course, that the Government can ever meet commercial competition, and, in fact, the scientific and technical men of the department do not expect it. As a general rule, they are willing to accept less in order that they may remain in strictly scientific work; nevertheless, the department is faced with the necessity of meeting the competition of the experiment stations, colleges, and universities, all of which have advanced the salaries of their staffs during the past two or three years. Unless the salary standards of the department are fairly comparable at least with those prevailing for similar scientific positions in these institutions, its scientific and technical force will continue to be drained of many of its most efficient workers. It can not stand this steady draft upon its trained personnel without serious impairment of service, nor can it utilize the funds appropriated by Congress to the best advantage with a constantly disintegrating organization and a constantly increasing percentage of new and relatively inexperienced personnel.</p> <p>It is of the utmost importance that the department should be able to retain its scientific and technical workers over long periods. From the standpoint of public service, a man when once embarked in an important field of investigation, if he is capable and efficient, should remain there for the rest of his active career. If he leaves to accept other employment, he carries with him much of the information he has secured in the progress of his work, which enriches him in experience but which can not possibly be put on record. This means, of course, that a new man continuing the problem must in many instances go over a considerable part of the field already covered before he reaches the point where his predecessor left off. It is in the interest of economy and efficiency, therefore, as well as of justice to the employees, to establish and maintain salary standards and opportunities that will enable the department to attract and hold the ablest and most far-seeing scientific and technical men in America.</p> <p>It can not be too strongly urged that the recommendation of the department be approved. It is vital to the maintenance and satisfactory prosecution of its research and other activities.</p>		

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

General object (title of appropriation), date of acts, references to Statutes at Large or to Revised Statutes, and estimated amount required for each detailed object.		Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1921.
(31) <i>Officers and employees of the Department of Agriculture traveling on official business, when authorized by the Secretary of Agriculture to receive per diem allowances in lieu of subsistence, in accordance with section 13 of the act of August 1, 1914 (38 Stat., 680), shall receive such allowances from each lump-sum appropriation provided for herein and made available for travel expenses, at rates of \$1.20, \$1.50, \$2.40, \$2.50, \$3, \$3.50, \$4, \$4.50, \$5, \$5.50, or \$6, varying with the character of work to be performed and the section of the country to be visited.</i>			
NOTE.—This item is annually submitted in accordance with section 13 of the act of Aug. 1, 1914 (38 Stat., 680), except that additional rates, \$4.50 to \$6, have been added in view of the recommendation under item 25 increasing the maximum per diem rate to \$6.			
Total salaries, Department of Agriculture		\$7, 926, 434. 00	\$6, 825, 060. 00
Total general expenses, Department of Agriculture		34, 062, 950. 00	24, 887, 724. 00
Grand total, Department of Agriculture		41, 989, 384. 00	31, 712, 784. 00
Total appropriations included in the Agricultural appropriation act: For the fiscal year 1912... \$16,900,016 For the fiscal year 1913... 16,651,496 For the fiscal year 1914... 17,986,945 For the fiscal year 1915... 19,865,832 For the fiscal year 1916... 22,971,782 For the fiscal year 1917... 24,948,852 For the fiscal year 1918... 25,929,113 For the fiscal year 1919... 27,875,352 For the fiscal year 1920... 33,899,761 For the fiscal year 1921... 31,712,784			
Total amount submitted in printed estimates for inclusion in the Agricultural appropriation bill: For the fiscal year 1913.... \$17,233,452 For the fiscal year 1914.... 18,287,230 For the fiscal year 1915.... 19,061,332 For the fiscal year 1916.... 20,706,013 For the fiscal year 1917.... 24,159,089 For the fiscal year 1918.... 26,096,907 For the fiscal year 1919.... 26,458,551 For the fiscal year 1920.... 30,048,786 For the fiscal year 1921.... 37,528,102 For the fiscal year 1922.... 41,988,784			
NOTE.—For estimate of the Secretary of Agriculture for "Printing and binding," under sec. 2, act of May 8, 1872 (Rev. Stat., 720, sec. 3661), see p. 322.			
For statement of condition of work, efficiency of employees, etc., see Appendix D of the Book of Estimates.			

Buildings rented by the Department of Agriculture in the District of Columbia for the fiscal year 1921. (Estimate for 1922 on p. 221.)

Name or location of building.	Purpose for which used.	Floor space (gross).	Annual rental.	Annual rental per square foot.	Assessed valuation of buildings and grounds.	Proportion of rental covering cost of heat, light, water, elevator, or other service.	Cost per square foot (gross), care, maintenance, upkeep, and operation of building. ¹
1358 B Street SW.....	Bureau of Markets, department library, Bureau of Plant Industry, Bureau of Biological Survey, Bureau of Crop Estimates, Division of Publications (offices and laboratories).	<i>Sq. ft.</i> 89,943	\$35,360.00	\$0.393	\$187,179.00	(²)	\$0.40
220 Fourteenth Street SW.....	Bureau of Plant Industry, States Relations Service (offices and storage).	55,755	20,000.00	.358	122,196.00	(²)	.401
Atlantic Building, 930 F Street NW.....	Forest Service (offices and storage).....	52,551	22,800.00	.433	138,670.00	³ \$10,000.00	.167
Homer Building, 601 Thirteenth Street NW. (portion of third floor).	Bureau of Plant Industry (offices).....	9,525	8,500.00	.892	869,100.00	500.00	.121
216 Thirteenth Street SW.....	Bureau of Chemistry (offices and laboratories).....	59,066	16,000.00	.270	97,861.00	(²)	.34
Buseh Building, 710 E Street NW.....	Bureau of Animal Industry, Bureau of Soils (offices and storage).	37,392	12,000.00	.320	83,010.00	(²)	.22
Willard Building, 513-515 Fourteenth Street NW...	Bureau of Public Roads (offices and laboratories).....	36,909	9,500.00	.257	161,836.00	(²)	.57
Globe Building, 339 Pennsylvania Avenue NW....	Bureau of Plant Industry (packeting, assembling, and mailing seeds; storage).	39,279	4,800.00	.122	27,312.00	(²)	.08
215 Thirteenth Street SW.....	Division of Publications (offices, storage, and mailing)....	17,656	4,000.00	.226	21,287.00	(²)	.474
1316 B Street SW.....	Office of the Solicitor (offices, files, and storage).....	10,778	3,000.00	.278	18,004.00	(²)	.52
220 Thirteenth Street SW.....	Insecticide and Fungicide Board, Bureau of Chemistry (offices and laboratories).	10,060	3,000.00	.298	17,045.00	(²)	.41
200-202 Fourteenth Street SW.....	Office of Farm Management.....	14,227	3,000.00	.210	21,435.00	(²)	.72
1350 B Street SW.....	Bureau of Animal Industry (offices).....	6,210	2,700.00	.434	19,720.00	(²)	.53
1304-1306 B Street SW.....	Bureau of Plant Industry (offices and storage).....	13,010	2,500.00	.192	21,669.00	(²)	.38
Munsey Building, room 638.....	Bureau of Animal Industry (offices).....	366	420.00	1.15	1,240,346.00	100.00	-----
221 Linworth Place SW.....	Bureau of Markets, Bureau of Animal Industry, Bureau of Plant Industry (offices, warehouse, cotton and paper work).	21,233	5,400.00	.254	31,287.00	(²)	.43
220 Linworth Place SW.....	Bureau of Markets, Bureau of Animal Industry, office of the Secretary (storage).	16,391	3,750.00	.228	19,176.00	(²)	.48
Terminal storage warehouse, E Street between Eleventh and Twelfth Streets SW.	Bureau of Markets (storage of cotton and paper).....	4,519	1,200.00	.265	271,570.00	(²)	-----
212-214 Thirteenth Street SW.....	Bureau of Chemistry (supply room and storage).....	9,127	960.00	.105	8,758.00	(²)	.28
Rear 215 Twelfth Street SW.....	Bureau of Chemistry, Bureau of Biological Survey, and Bureau of Markets (storage).	3,959	840.00	.21	3,402.00	(²)	-----
Rear 217 Twelfth Street SW.....	Bureau of Chemistry (storage).....	1,339	108.00	.08	300.00	(²)	-----
929 Seventh Street SW.....	Bureau of Soils, Bureau of Animal Industry, office of the Secretary, Bureau of Public Roads (storage).	8,051	600.00	.074	16,393.00	(²)	-----
2511 M Street NW.....	Weather Bureau (storage).....	2,224	500.00	.22	3,092.00	(²)	-----
920 F Street NW. (portion of basement).....	Forest Service (storage).....	1,230	420.00	.341	62,512.00	(²)	-----
Rear 913 E Street NW.....	Forest Service (workshop).....	1,400	270.00	.193	2,800.00	(²)	-----
215 Linworth Place SW.....	Bureau of Animal Industry (storage).....	500	300.00	.60	3,089.00	(²)	-----
Rear 349 Pennsylvania Avenue NW.....	Bureau of Plant Industry (auto truck storage).....	375	84.00	.224	500.00	(²)	-----
1312 B Street SW.....	States Relations Service (offices).....	2,504	1,000.00	.399	5,876.00	(²)	.75
1369 C Street SW.....	Bureau of Markets (offices and laboratories).....	2,284	600.00	.252	3,291.00	(²)	.626
Rear 1806 E Street NW.....	All branches (auto truck storage and repair shop).....	3,600	1,200.00	.333	7,260.00	(²)	.90
930 Baptist Alley NW.....	Forest Service (auto truck storage).....	160	60.00	.37	300.00	(²)	-----
Total amount paid for rent in the District of Columbia.....		531,623	164,872.00	-----	-----	-----	-----

Average rental, \$0.31 per square foot.

¹ Where salaries and wages have entered into cost of maintenance, upkeep, and operation of building, the increased compensation of \$240 has been included.

² None.

³ Approximately.

Statement regarding Government-owned buildings used by the Department of Agriculture in the District of Columbia during the fiscal year 1920 (41 Stat., p. 945).

Name and location.	Valuation of building, not including land.	Purpose for which used.	Number of square feet (gross).	Cost per square foot of floor space for care, maintenance, upkeep, and operation. ¹
Administration.....	\$100,000.00	Offices and storage.....	40,529	\$0.37
East wing.....	750,000.00	Offices and laboratories.....	78,015	.40
West wing.....	750,000.00	do.....	78,015	.416
Information.....	2,000.00	Offices.....	1,291	.37
Entomology.....	25,000.00	do.....	20,092	.449
Entomology annex.....	7,000.00	do.....	20,092	.449
Greenhouses.....	150,000.00	Propagating plants.....	85,598	.18
Shops and stables.....	25,000.00	Mechanical shops; Secretary's stables.....	31,958	.259
Plant inspection house.....	5,000.00	Quarantine work.....	2,318	.281
Weather Bureau.....	250,000.00	Offices and laboratories.....	47,766	.414
1418 Pennsylvania Avenue.....	10,000.00	Offices and storage.....	3,723	.568

¹ Wages include increase of compensation.

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the fiscal year ending June 30, 1921.	Amount appropriated for the fiscal year ended June 30, 1920.
PERMANENT ANNUAL APPROPRIATIONS.			
(1) <i>Meat Inspection, Bureau of Animal Industry—</i>			
That there is permanently appropriated, out of any money in the Treasury not otherwise appropriated, the sum of \$3,000,000, for the expenses of the inspection of cattle, sheep, swine, and goats, and the meat and meat-food products thereof which enter into interstate or foreign commerce, and for all expenses necessary to carry into effect the provisions of this act relating to meat inspection, including rent and the employment of labor in Washington and elsewhere, for each year. And the Secretary of Agriculture shall, in his annual estimates made to Congress, submit a statement in detail, showing the number of persons employed in such inspections and the salary or per diem paid to each, together with the contingent expenses of such inspectors and where they have been and are employed (<i>act June 30, 1906, vol. 34, pp. 674-679, secs. 1-22</i>) -----	\$3, 000, 000. 00	\$3, 000, 000. 00	\$3, 000, 000. 00
NOTE.—The detailed statement required by law has been submitted to Congress in a separate communication and will be printed as a public document.			
(2) <i>Refunds to Depositors Excess of Deposits, National Forests Fund—</i>			
That all money received after July 1, 1907, by or on account of the Forest Service for timber, or from any other source of forest-reservation revenue, shall be covered into the Treasury of the United States as a miscellaneous receipt; and there is hereby appropriated and made available as the Secretary of Agriculture may direct, out of any funds in the Treasury not otherwise appropriated, so much as may be necessary to make refunds to depositors of money heretofore or hereafter deposited by them to secure the purchase price on the sale of any products or for the use of any land or resources of the national forests in excess of amounts found actually due from them to the United States.			
(3) That so much of an act entitled "An act making appropriations for the Department of Agriculture for the fiscal year ending June 30, 1908," approved Mar. 4, 1907 (34 Stat. L., pp. 1256, 1270), which provides for refunds by the Secretary of Agriculture to depositors of moneys to secure the purchase price of timber or the use of lands or resources of the national forests such sums as may be found to be in excess of the amounts found actually due the United States, be, and is hereby amended hereafter to appropriate and to include so much as may be necessary to refund or pay over to the rightful claimants such sums as may be found by the Secretary of Agriculture to have been erroneously collected for the use of any lands, or for timber or other resources sold from lands located within, but not a part of, the national forests, or for alleged illegal acts done upon such lands, which acts are subsequently found to have been proper and legal; and the Secretary of Agriculture shall make annual report to Congress of the amounts refunded hereunder (<i>acts Mar. 4, 1907, vol. 34, pp. 1256, 1270, sec. 1; Mar. 4, 1911, vol. 36, p. 1253, sec. 1</i>) -----	75, 000. 00	50, 000. 00	69, 788. 65

	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the fiscal year ending June 30, 1921.	Amount appropriated for the fiscal year ended June 30, 1920.
<p>(4) <i>Acquisition of Lands for Protection of Watersheds of Navigable Streams—</i></p> <p>That there is hereby appropriated, for the fiscal year ending June 30, 1910, the sum of \$1,000,000, and for each fiscal year thereafter a sum not to exceed \$2,000,000, for use in the examination, survey, and acquirement of lands located on the headwaters of navigable streams or those which are being or which may be developed for navigable purposes: <i>Provided</i>, That the provisions of this section shall expire by limitation on the 30th day of June, 1915 (<i>act Mar. 1, 1911, vol. 36, p. 961, sec. 3</i>) -----</p>			\$63, 271. 43
<p>(5) <i>National Forest Reservation Commission—</i></p> <p>That a sum sufficient to pay the necessary expenses of the commission and its members, not to exceed an annual expenditure of \$25,000, is hereby appropriated out of any money in the Treasury not otherwise appropriated. Said appropriation shall be immediately available and shall be paid out on the audit and order of the president of the said commission, which audit and order shall be conclusive and binding upon all departments as to the correctness of the accounts of said commission (<i>act Mar. 1, 1911, vol. 36, p. 963, sec. 14</i>) -----</p>	\$25, 000. 00	\$25, 000. 00	1, 231. 80
<p>(6) <i>Cooperative Agricultural Extension Work—</i></p> <p>That for the purpose of paying the expenses of said cooperative agricultural extension work and the necessary printing and distributing of information in connection with the same, there is permanently appropriated, out of any money in the Treasury not otherwise appropriated, the sum of \$480,000 for each year, \$10,000 of which shall be paid annually, in the manner hereinafter provided, to each State which shall by action of its legislature assent to the provisions of this act: <i>Provided</i>, That payment of such installments of the appropriation hereinbefore made as shall become due to any State before the adjournment of the regular session of the legislature meeting next after the passage of this act may, in the absence of prior legislative assent, be made upon the assent of the governor thereof, duly certified to the Secretary of the Treasury: <i>Provided further</i>, That there is also appropriated an additional sum of \$600,000 for the fiscal year following that in which the foregoing appropriation first becomes available, and for each year thereafter for seven years a sum exceeding by \$500,000 the sum appropriated for each preceding year, and for each year thereafter there is permanently appropriated for each year the sum of \$4,100,000 in addition to the sum of \$480,000 hereinbefore provided: <i>Provided further</i>, That before the funds herein appropriated shall become available to any college for any fiscal year plans for the work to be carried on under this act shall be submitted by the proper officials of each college and approved by the Secretary of Agriculture. Such additional sums shall be used only for the purposes hereinbefore stated, and shall be allotted annually to each State by the Secretary of Agriculture and paid in the manner hereinbefore provided, in the proportion which the rural population of each State bears to the total rural pop-</p>			

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the fiscal year ending June 30, 1921.	Amount appropriated for the fiscal year ended June 30, 1920.
(6) <i>Cooperative Agricultural Extension Work</i> —Continued.			
ulation of all the States as determined by the next preceding Federal census: <i>Provided further</i> , That no payment out of the additional appropriations herein provided shall be made in any year to any State until an equal sum has been appropriated for that year by the legislature of such State, or provided by State, county, college, local authority, or individual contributions from within the State, for the maintenance of the cooperative agricultural extension work provided for in this act (<i>act May 8, 1914, vol. 38, p. 373, sec. 3</i>)----	\$4, 080, 000. 00	\$3, 580, 000. 00	\$3, 080, 000. 00
(7) <i>Cooperative Construction of Rural Post Roads</i> —			
The Secretary of Agriculture is authorized to cooperate with the States, through their respective State highway departments, in the construction of rural post roads; but no money apportioned under this act to any State shall be expended therein until its legislature shall have assented to the provisions of this act, except that, until the final adjournment of the first regular session of the legislature held after the passage of this act, the assent of the governor of the State shall be sufficient. The Secretary of Agriculture and the State highway department of each State shall agree upon the roads to be constructed therein and the character and method of construction: <i>Provided</i> , That all roads constructed under the provisions of this act shall be free from tolls of all kinds.			
SEC. 3. That for the purpose of carrying out the provisions of this act there is hereby appropriated, out of any money in the Treasury not otherwise appropriated, for the fiscal year ending June 30, 1917, the sum of \$5,000,000; for the fiscal year ending June 30, 1918, the sum of \$10,000,000; for the fiscal year ending June 30, 1919, the sum of \$15,000,000; for the fiscal year ending June 30, 1920, the sum of \$20,000,000; and for the fiscal year ending June 30, 1921, the sum of \$25,000,000. So much of the appropriation apportioned to any State for any fiscal year as remains unexpended at the close thereof shall be available for expenditure in that State until the close of the succeeding fiscal year, except that amounts apportioned for any fiscal year to any State which has not a State highway department shall be available for expenditure in that State until the close of the third fiscal year succeeding the close of the fiscal year for which such apportionment was made. Any amount apportioned under the provisions of this act unexpended at the end of the period during which it is available for expenditure under the terms of this section shall be reapportioned, within 60 days thereafter, to all the States in the same manner and on the same basis, and certified to the Secretary of the Treasury and to the State highway departments and to the governors of States having no State highway departments in the same way as if it were being apportioned under this act for the first time: <i>Provided</i> , That in States where the constitution prohibits the State from engaging in any work of internal improvements, then the amount of the appropriation under this act apportioned to any such State shall be turned over to the highway depart-			

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the fiscal year ending June 30, 1921.	Amount appropriated for the fiscal year ended June 30, 1920.
(7) <i>Cooperative Construction of Rural Post Roads—Continued.</i>			
<p>ment of the State or to the governor of said State to be expended under the provisions of this act and under the rules and regulations of the Department of Agriculture, when any number of counties in any such State shall appropriate or provide the proportion or share needed to be raised in order to entitle such State to its part of the appropriation apportioned under this act.</p> <p>SEC. 4. That so much, not to exceed 3 per centum, of the appropriation for any fiscal year made by or under this act as the Secretary of Agriculture may estimate to be necessary for administering the provisions of this act shall be deducted for that purpose, available until expended. Within 60 days after the close of each fiscal year the Secretary of Agriculture shall determine what part, if any, of the sums theretofore deducted for administering the provisions of this act will not be needed for that purpose and apportion such part, if any, for the fiscal year then current in the same manner and on the same basis, and certify it to the Secretary of the Treasury and to the State highway departments, and to the governors of States having no State highway departments, in the same way as other amounts authorized by this act, to be apportioned among all the States for such current fiscal year. The Secretary of Agriculture, after making the deduction authorized by this section, shall apportion the remainder of the appropriation for each fiscal year among the several States in the following manner: One-third in the ratio which the area of each State bears to the total area of all the States; one-third in the ratio which the population of each State bears to the total population of all the States, as shown by the latest available Federal census; one-third in the ratio which the mileage of rural delivery routes and star routes in each State bears to the total mileage of rural delivery routes and star routes in all the States, at the close of the next preceding fiscal year, as shown by the certificate of the Postmaster General, which he is directed to make and furnish annually to the Secretary of Agriculture.</p> <p>SEC. 5. That within 60 days after the approval of this act the Secretary of Agriculture shall certify to the Secretary of the Treasury and to each State highway department and to the governor of each State having no State highway department the sum which he has estimated to be deducted for administering the provisions of this act and the sum which he has apportioned to each State for the fiscal year ending June 30, 1917, and on or before January 20 next preceding the commencement of each succeeding fiscal year shall make like certificates for such fiscal year (<i>act July 11, 1916, vol. 39, p. 356, secs. 1, 3, 4, and 5</i>) -----</p>		\$25,000,000.00	\$20,305,622.75

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the fiscal year ending June 30, 1921.	Amount appropriated for the fiscal year ended June 30, 1920.
<p>(8) <i>Cooperative Construction, etc., of Roads and Trails, National Forests—</i></p> <p>SEC. 8. That there is hereby appropriated and made available until expended, out of any moneys in the National Treasury not otherwise appropriated, the sum of \$1,000,000 for the fiscal year ending June 30, 1917, and each fiscal year thereafter, up to and including the fiscal year ending June 30, 1926, in all \$10,000,000, to be available until expended under the supervision of the Secretary of Agriculture, upon request from the proper officers of the State, Territory, or county for the survey, construction, and maintenance of roads and trails within or only partly within the national forests, when necessary for the use and development of resources upon which communities within and adjacent to the national forests are dependent: <i>Provided</i>, That the State, Territory, or county shall enter into a cooperative agreement with the Secretary of Agriculture for the survey, construction, and maintenance of such roads or trails upon a basis equitable to both the State, Territory, or county, and the United States: <i>And provided also</i>, That the aggregate expenditures in any State, Territory, or county shall not exceed 10 per centum of the value, as determined by the Secretary of Agriculture, of the timber and forage resources which are or will be available for income upon the national forest lands within the respective county or counties wherein the roads or trails will be constructed; and the Secretary of Agriculture shall make annual report to Congress of the amounts expended hereunder.</p> <p>That immediately upon the execution of any cooperative agreement hereunder the Secretary of Agriculture shall notify the Secretary of the Treasury of the amount to be expended by the United States within or adjacent to any national forest thereunder, and beginning with the next fiscal year and each fiscal year thereafter the Secretary of the Treasury shall apply from any and all revenues from such forest 10 per centum thereof to reimburse the United States for expenditures made under such agreement until the whole amount advanced under such agreement shall have been returned from the receipts from such national forest.</p> <p>SEC. 9. That out of the appropriations made by or under this act, the Secretary of Agriculture is authorized to employ such assistants, clerks, and other persons in the city of Washington and elsewhere, to be taken from the eligible lists of the Civil Service Commission, to rent buildings outside of the city of Washington, to purchase such supplies, material, equipment, office fixtures, and apparatus, and to incur such travel and other expense as he may deem necessary for carrying out the purposes of this act (<i>act July 11, 1916, vol. 39, p. 358, secs. 8, 9</i>)</p>	<p>\$1, 000, 000. 00</p>	<p>\$1, 000, 000. 00</p>	<p>\$1, 699, 043. 82</p>

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the fiscal year ending June 30, 1921.	Amount appropriated for the fiscal year ended June 30, 1920.
SPECIAL FUNDS.			
(9) <i>Payment to States and Territories from the National Forests Fund—</i>			
That hereafter 25 per cent of all money received from each forest reserve during any fiscal year, including the year ending June 30, 1908, shall be paid at the end thereof by the Secretary of the Treasury to the State or Territory in which said reserve is situated, to be expended as the State or Territorial legislature may prescribe for the benefit of the public schools and public roads of the county or counties in which the forest reserve is situated: <i>Provided</i> , That when any forest reserve is in more than one State or Territory or county the distributive share to each from the proceeds of said reserve shall be proportional to its area therein (<i>acts Mar. 4, 1907, vol. 34, p. 1270, sec. 1; May 23, 1908, vol. 35, p. 260, sec. 1</i>) -----			
That 5 per cent of all moneys received during any fiscal year from each national forest into which the lands acquired under this act may from time to time be divided shall be paid, at the end of such year, by the Secretary of the Treasury to the State in which such national forest is situated, to be expended as the State legislature may prescribe for the benefit of the public schools and public roads of the county or counties in which such national forest is situated: <i>Provided</i> , That when any national forest is in more than one State or county the distributive share to each from the proceeds of such forest shall be proportional to its area therein: <i>Provided further</i> , That there shall not be paid to any State for any county an amount equal to more than 40 per cent of the total income of such county from all other sources (<i>act Mar. 1, 1911, vol. 36, p. 963, sec. 13</i>) -----	\$1,200,000.00	\$1, 200, 000. 00	\$1, 069. 886. 88
That sec. 13 of the act entitled "An act to enable any State to cooperate with any other State or States, or with the United States, for the protection of the watersheds of navigable streams, and to appoint a commission for the acquisition of lands for the purpose of conserving the navigability of navigable rivers," approved Mar. 1, 1911 (36 Stat. L., 963), is hereby amended by striking out the word "five" in the first line of said section and inserting in lieu thereof the word "twenty-five" (<i>act June 30, 1914, vol. 38, p. 441, sec. 1</i>) -----			

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the fiscal year ending June 30, 1921.	Amount appropriated for the fiscal year ended June 30, 1920.
(10) <i>Cooperative Work, Forest Service—</i>			
Hereafter all moneys received as contributions toward cooperative work in forest investigations shall be covered into the Treasury and shall constitute a special fund, which is hereby appropriated and made available until expended, as the Secretary of Agriculture may direct, for the payment of the expenses of said investigations by the Forest Service and for refunds to the contributors of amounts heretofore or hereafter paid in by them in excess of their share of the cost of said investigations (<i>acts Mar. 3, 1905, vol. 33, p. 1070, sec. 1; June 30, 1906, vol. 34, p. 684, sec. 1</i>) -----			
That hereafter all moneys received as contributions toward cooperative work in forest investigations, or the protection and improvement of the national forests, shall be covered into the Treasury and shall constitute a special fund, which is hereby appropriated and made available until expended, as the Secretary of Agriculture may direct, for the payment of the expenses of said investigations, protection, or improvements by the Forest Service, and for refunds to the contributors of amounts heretofore or hereafter paid in by them in excess of their share of the cost of said investigations, protection, or improvements: <i>Provided</i> , That annual report shall be made to Congress of all such moneys so received as contributions for such cooperative work (<i>act June 30, 1914, vol. 38, p. 430, sec. 1</i>) -----	\$1,800,000.00	\$600,000.00	\$1,635,903.65
(11) <i>Payment to School Funds, Arizona and New Mexico, National Forests Fund—</i>			
At the close of each fiscal year there shall be paid by the Secretary of the Treasury to the State, as income for its common-school fund, such proportion of the gross proceeds of all the national forests within said State as the area of lands hereby granted to said State for school purposes which are situated within said forest reserves, whether surveyed or unsurveyed, and for which no indemnity has been selected, may bear to the total area of all the national forests within said States (<i>act June 20, 1910, vol. 36, p. 557, sec. 1</i>) -----	70,000.00	85,000.00	78,867.32
(12) <i>Roads and Trails for States, National Forests Fund—</i>			
That hereafter an additional 10 per cent of all moneys received from the national forests during each fiscal year shall be available at the end thereof, to be expended by the Secretary of Agriculture for the construction and maintenance of roads and trails within the national forests in the States from which such proceeds are derived; but the Secretary of Agriculture may, whenever practicable, in the construction and maintenance of such roads, secure the cooperation or aid of the proper State or Territorial authorities in the furtherance of any system of highways of which such roads may be made a part (<i>act Mar. 4, 1913, vol. 37, p. 843, sec. 1</i>) -----	500,000.00	500,000.00	465,828.06

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the fiscal year ending June 30, 1921.	Amount appropriated for the fiscal year ended June 30, 1920.
(13) <i>Proceeds, Sale of Timber from Indian Lands, Uinta National Forest—</i> Indefinite appropriation of the proceeds from the sale of timber on Uinta National Forest; such sums as may be appropriated being available for transfer from this special fund to the Indian trust fund "Proceeds of Uinta and White River Ute lands," upon rendition from time to time of auditor's certificates of settlement calling for transfer (<i>act Mar. 3, 1905, vol. 33, p. 1070, sec. 1</i>)			
(14) <i>Agricultural Experiment Stations, Receipts from Sales—</i> Receipts from sales of products, Alaska (<i>act June 3, 1902, vol. 32, p. 302, sec. 1</i>) Receipts from sales of products, Hawaii (<i>same act</i>) Receipts from sales of products, Porto Rico (<i>same act</i>) Receipts from sales of products, Guam (<i>act May 23, 1908, vol. 35, p. 266, sec. 1</i>)			\$624. 24
Total Permanent and Indefinite Appropriations under Department of Agriculture	\$11, 750, 000. 00	\$35, 040, 000. 00	\$31, 470, 068. 60
PRINTING AND BINDING. [Carried in sundry civil act.]			
(15) For the Department of Agriculture, including [not to exceed \$47,000 for the Weather Bureau, and including] the Annual Report of the Secretary of Agriculture, as required by the Act approved January 12, 1895, and in pursuance of the joint resolution numbered 13, approved Mar. 30, 1906, and also including not to exceed \$250,000 for Farmers' Bulletins, which shall be adapted to the interests of the people of the different sections of the country [an equal proportion of four-fifths of which shall be delivered to or sent out under the addressed franks furnished by Senators, Representatives, and Delegates in Congress, as they shall direct, \$725,000], \$800,000: <i>Provided, That hereafter the Secretary of Agriculture may, within the limitations of the appropriations available, print and issue the Experiment Station Record, Journal of Agricultural Research, Monthly Weather Review, Crop Reporter, Market Reporter, Public Roads, Weekly News Letter, Atlas of American Agriculture, and such other journals, magazines, periodicals, and other similar publications as he may deem necessary</i>	800, 000. 00	725, 000. 00	675, 000. 00
NOTE.—An increase of \$75,000 is recommended and is urgently needed in the appropriation for printing and binding for the Department of Agriculture for the fiscal year 1922. This amount is requested principally for the purpose of printing bulletins and reports containing the results of scientific investigations of the department. These publications are of great value to the public, especially to research and technical workers, educational institutions, etc., and serve as a very effective means of disseminating information of widespread interest to different sections of the country. During the fiscal year 1920 the department was able to use only \$89,487 for printing this class of publications, due to the necessity for reserving funds for other urgent printing. The opportunity to serve the public through this medium is one which the department believes should not be neglected, but it will be impossible to carry out an adequate and comprehensive plan of bulletin publication for less than the amount recommended. The provision for distribution of four-fifths of the edition of Farmers' Bulletins upon orders of Members of Congress is omitted			

Estimates of appropriations required for the service of the fiscal year ending June 30, 1922—Continued.

	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the fiscal year ending June 30, 1921.	Amount appropriated for the fiscal year ended June 30, 1920.
<p>PRINTING AND BINDING—continued.</p> <p>because it is believed that a more advantageous and effective distribution will be obtained if the bulletins are distributed directly by the department. At the same time, Members of Congress will be relieved of the routine of handling the distribution imposed upon them under the present arrangement.</p> <p>A proviso has been added designed to provide specific authority for the continuation of the valuable serial or periodical publications now being issued by the department. Unless such authority is secured, the periodicals now published will have to be discontinued under the provisions of section 4 of the sundry civil act approved June 5, 1920. Any curtailment of the issuance of these publications would seriously interfere with the service rendered the public by the department in making known the progress of agriculture as developed by its scientific investigations and other activities and would directly cripple the work of the department in its efforts to "diffuse among the people of the United States useful information on subjects connected with agriculture," as required by the organic act establishing the department.</p>			
Total	\$12, 550, 000. 00	\$35, 765, 000. 00	\$32,145,068.60

Total appropriations for the Department of Agriculture, including permanent annual appropriations, deficiency acts, special acts, and printing and binding under sundry civil act:

For the fiscal year—

1912	\$22, 402, 301. 11
1913	25, 177, 164. 68
1914	24, 449, 824. 37
1915	26, 840, 434. 55
1916	29, 019, 703. 98
1917	37, 188, 852. 00
1918	72, 359, 546. 60
1919	62, 939, 603. 00
1920	140, 801, 270. 00
1921	138, 572, 784. 00

